

**BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA**

DOCKET NO. 2018-318-E

In the Matter of:)	
)	
Application of Duke Energy Progress, LLC)	DIRECT TESTIMONY OF
For Adjustments in Electric Rate Schedules)	LAURA BATEMAN
and Tariffs)	FOR
)	DUKE ENERGY PROGRESS, LLC

I. INTRODUCTION AND PURPOSE

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**
2 **POSITION.**

3 A. My name is Laura A. Bateman and my business address is 411 Fayetteville Street,
4 Raleigh, North Carolina. I am a Director of Rates & Regulatory Planning,
5 employed by Duke Energy Carolinas, LLC, testifying on behalf of Duke Energy
6 Progress, LLC (“DE Progress” or the “Company”).

7 **Q. WHAT ARE YOUR RESPONSIBILITIES IN THIS ROLE?**

8 A. I have responsibility for the development of cost of service studies and quarterly
9 financial reports for both DE Progress and Duke Energy Carolinas, LLC (“DE
10 Carolinas”).

11 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND**
12 **AND PROFESSIONAL EXPERIENCE.**

13 A. I obtained a Bachelor’s degree from the University of Massachusetts at Amherst
14 in 1994 and a Master of Business Administration degree from the University of
15 North Carolina at Chapel Hill in 2003. Since 2003, I have worked for the
16 Company in a variety of roles in Risk Management, Treasury, and Regulatory. I
17 have been in the Rates & Regulatory Strategy group since 2007.

18 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

19 A. Yes. I have filed testimony before this Commission in several dockets, including
20 DE Progress’ last rate case (Docket 2016-227-E), the proceeding to establish the
21 DSM/EE rider (Docket 2008-251-E), a net metering proceeding (Docket 2005-

1 385-E), and a proceeding related to the Energy Independence and Security Act of
2 2007 (Docket 2008-447-EG).

3 **Q. ARE YOU FAMILIAR WITH THE ACCOUNTING PROCEDURES AND**
4 **BOOKS OF ACCOUNT OF DUKE ENERGY PROGRESS?**

5 A. Yes. The books of account of DE Progress follow the Uniform System of
6 Accounts prescribed by the Federal Energy Regulatory Commission.

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. The purpose of my testimony is to discuss the results of DE Progress' operations
10 under present rates on the basis of an adjusted historical Test Period using the
11 twelve-month period ended December 31, 2017 (the "Test Period"). I discuss the
12 additional revenue required as a result of the cost of service based on the pro
13 forma costs in the Test Period. I discuss several pro forma adjustments to the
14 Company's Test Period operating expenses and rate base. I also provide the
15 capital structure used in developing the revenue requirements in this case. I also
16 explain the requests the Company is making regarding excess deferred income
17 taxes ("EDIT") rider, and cost recovery related to grid improvement investments
18 and storm cost.

19 **Q. DOES YOUR TESTIMONY INCLUDE ANY EXHIBITS?**

20 A. Yes. I have included four exhibits. Bateman Exhibit 1 sets forth the operating
21 results under current and proposed rates. Bateman Exhibit 2 summarizes the cost
22 of service results and the proposed increases for the South Carolina retail
23 jurisdiction by customer class. Bateman Exhibit 3 shows the calculation of the

1 proposed EDIT rider to return certain tax change benefits to customers. Bateman
2 Exhibit 4 shows the Company's proposed Phase 1 and Phase 2 base rate step-ups
3 related to the Grid Improvement Plan.

4 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
5 **DIRECTION AND SUPERVISION?**

6 A. Yes. These exhibits were prepared under my supervision.

7 **II. DETERMINING THE REVENUE REQUIREMENT**

8 **Q. WHAT IS THE REVENUE REQUIREMENT AND HOW DID DE**
9 **PROGRESS CALCULATE IT?**

10 A. The revenue requirement represents the annual revenues necessary for the
11 Company to recover its operating expenses (including depreciation and taxes) and
12 provide its investors with a fair rate of return on the investment in rate base. DE
13 Progress determined its operating costs by identifying depreciation and
14 amortization expense, operations and maintenance ("O&M") expense, fuel
15 expense, taxes, and other expenses charged to utility operations and recorded in
16 its accounting records for the Test Period. The amount of rate base is determined
17 by adding the year-end balances in the Company's accounting records of plant in
18 service, accumulated depreciation, materials and supplies (including fuel
19 inventory) and components of working capital, including certain regulatory assets
20 and liabilities, less deferred taxes and operating reserves. Next, a cost of service
21 study is prepared that allocates and assigns these actual Company operating costs
22 and rate base amounts to determine the per book cost for providing electric
23 service to the Company's South Carolina retail operations. DE Progress' Witness

1 Hager discusses in greater detail the allocation process and methodologies used to
2 develop these amounts.

3 Following the cost of service study, the actual Test Period expense and
4 rate base levels, as allocated to the South Carolina retail operations, were adjusted
5 for known and measurable changes, as described below and in the testimony of
6 Witnesses Ward and Wheeler. DE Progress made certain accounting and pro
7 forma adjustments to actual operating income and rate base for the Test Period to
8 reflect known and measurable changes in order to (i) normalize for abnormal
9 events; (ii) annualize part year recurring effects to a full year effect; and (iii) show
10 actual changes in costs, revenues or the cost of the Company's property used and
11 useful, or to be used and useful within a reasonable time after the Test Period, in
12 providing service.

13 After the determination of operating expenses and rate base for the
14 Company's South Carolina retail operations, rate base is split between the
15 Company's debt investors and equity investors using the Company's proposed
16 capital structure of 53 percent equity and 47 percent debt. Then, the annual cost
17 of debt is calculated. The income available for the Company's equity investors is
18 determined by subtracting the cost of debt from the operating income produced by
19 the current revenues received from South Carolina retail customers less operating
20 expenses. Finally, the required revenue increase necessary to produce the
21 requested equity return on the amount of the equity invested in rate base is
22 determined.

1 Bateman Exhibit 1 sets forth the rate base, operating revenues, operating
2 expenses and operating income the Company earned during the Test Period and
3 the adjusted amounts the Company supports for use in calculating its proposed
4 revenue requirement.

5 **III. RESULTS OF OPERATIONS UNDER EXISTING**
6 **AND PROPOSED RATES**

7 **Q. PLEASE DESCRIBE BATEMAN EXHIBIT 1 TO YOUR TESTIMONY.**

8 A. Bateman Exhibit 1 sets forth the operating results and data required by
9 Commission Reg. 103-823 regarding operating income, calculation of additional
10 revenue requirement, accounting adjustments, and rate base information. The
11 operating results are based on the Test Period noted above, using the twelve
12 months ending December 31, 2017, with appropriate adjustments. This
13 information is also shown on Pages 1 through 4d of Exhibit D of the Company's
14 Application.

15 **Q. PLEASE EXPLAIN WHAT IS PRESENTED ON PAGE 1 OF BATEMAN**
16 **EXHIBIT 1 ENTITLED "OPERATING INCOME FROM ELECTRIC**
17 **OPERATIONS."**

18 A. Page 1 summarizes the Company's operating income from electric operations for
19 the Test Period both for total Company operations and South Carolina retail
20 operations before the necessary accounting adjustments. It also shows the
21 Company's operating income from electric operations for South Carolina retail
22 operations after the necessary accounting adjustments and the rate of return on
23 South Carolina retail rate base the Company would earn in the Test Period after
24 reflecting those adjustments.

1 Column 1 and 2 set forth the actual operating revenues, expenses and rate
2 base from the per book cost of service study for the Company and for its South
3 Carolina retail jurisdiction, respectively.

4 Column 3 summarizes the accounting adjustments allocated to South
5 Carolina retail operations necessary to reflect a representative level of operating
6 income and rate base based on known changes in costs. These adjustments are
7 shown on Bateman Exhibit 1, page 3 and are explained later in my testimony and
8 in the testimony of Witnesses Ward and Wheeler.

9 Column 4 shows adjusted South Carolina retail operations.

10 Column 5, Line 1 shows the additional base rate revenue requested in this
11 proceeding of \$68,668,000. The Company is also proposing a rider to decrease
12 revenues by \$10,008,000 for certain tax benefits for a net increase of
13 \$58,660,000. This is the increase in revenues justified as necessary to cover the
14 Company's cost of service, including a rate of return on members' equity of 10.5
15 percent as discussed in the testimony of Witnesses Hevert and Sullivan. Column
16 5 also shows the effect of the revenue increase on general taxes, the Commission
17 regulatory fee, and income taxes.

18 Column 6, Line 13 shows adjusted operating income after the proposed
19 increase in revenues. Column 6, Line 14 shows the adjusted retail rate base.
20 Dividing operating income by rate base produces the 7.47 percent overall rate of
21 return that the Company is justifying in this case, as shown on Column 6, Line 15.

1 **Q. PLEASE EXPLAIN WHAT IS PRESENTED ON PAGE 2 OF BATEMAN**
2 **EXHIBIT 1 ENTITLED “CALCULATION OF ADDITIONAL REVENUE**
3 **REQUIREMENT.”**

4 A. Page 2 sets forth the calculation of the additional revenue requirement necessary
5 to produce a 10.50 percent rate of return on members’ equity using the format
6 required by Commission Reg. 103-823. To develop this figure, the South
7 Carolina retail rate base was allocated to its capital source components of long-
8 term debt and members’ equity. This allocation was based on the capitalization
9 ratios of 47 percent long-term debt and 53 percent members’ equity, which is the
10 Company’s targeted capital structure that this Commission found just and
11 reasonable in its *Order Approving Increase in Rates and Charges and Settlement*
12 *Agreement*, Order No. 2016-871 issued in Docket No. 2016-227-E, in DE
13 Progress’ last general rate case, and in its *Order Approving Increase in Rates and*
14 *Charges and Settlement Agreement*, Order No. 2013-661 issued in Docket No.
15 2013-59-E, in Duke Energy Carolinas’ last general rate case. Witness Sullivan
16 also comments in his testimony that the 53 percent equity ratio will help enable
17 access to capital at reasonable rates.

18 The amount of operating income needed to cover interest applicable to
19 South Carolina retail rate base was computed using the embedded cost of long-
20 term debt rate. This amount is shown in Columns 4 and 7 on Line 1. Operating
21 income needed to cover long-term debt interest, shown in Columns 5 and 8 on
22 Line 1, was deducted from total operating income, shown in Column 5 on Line 3,

1 to derive operating income remaining for members' equity at present rates as
2 shown in Column 5 on Line 2.

3 Applying the 10.5 percent rate of return on members' equity to that
4 portion of the South Carolina retail rate base financed by members' equity, shown
5 in Column 6, Line 2 produces an operating income requirement for members'
6 equity as shown in Column 8, Line 2.

7 The total operating income requirement shown in Column 8, Line 3 is the
8 sum of the requirements for long-term debt and members' equity. Comparing the
9 operating income requirement to the operating income before the proposed
10 increase in Column 5, Line 3 results in the additional operating income
11 requirement shown in Column 8, Line 7 after considering the impact of customer
12 growth. To realize this additional operating income, the Company must collect in
13 revenues the increase in the license fee at a rate of 0.3 percent (\$3 for each \$1,000
14 of gross receipts), the public utility assessment fee at a rate of 0.14 percent, state
15 income taxes at a rate of 5 percent, and federal income taxes at a rate of 21
16 percent. The additional operating income requirement and the additional taxes
17 and fees produce an additional base rate revenue requirement of \$68,668,000.

18 **Q. HOW DO YOU PROPOSE TO ALLOCATE THE REVENUE INCREASE**
19 **AMONG THE CLASSES?**

20 A. Bateman Exhibit 2 shows how the additional revenue requirement is spread
21 among the classes and how the target revenue requirements for rate design are
22 established. The rate increase shown in the exhibit has been allocated to the rate
23 classes on the basis of rate base, and then combined with an additional increase or

1 decrease at the customer class level that results in a 25 percent reduction in each
2 class's variance from the overall average rate of return. This additional increase
3 or decrease at the customer class level nets to \$0 for the South Carolina retail
4 jurisdiction in total, but brings the customer classes closer to the average rate of
5 return, and is an appropriate way to gradually bring rate classes closer to rate
6 parity over time. This approach is consistent with the approaches in the last
7 general rate proceedings for both DE Carolinas and DE Progress. The proposed
8 revenue increases by rate class on Bateman Exhibit 2 were provided to Witness
9 Wheeler and were used in the development of the rate design used in this case.

10 **IV. ACCOUNTING AND PRO FORMA ADJUSTMENTS**

11 **Q. PLEASE EXPLAIN PAGE 3 OF BATEMAN EXHIBIT 1 CAPTIONED**
12 **“DETAIL OF ACCOUNTING ADJUSTMENTS-SOUTH CAROLINA**
13 **RETAIL.”**

14 A. Page 3 sets forth the individual accounting and pro forma adjustments to
15 operating revenues and expenses, including the income tax effects for South
16 Carolina retail electric operations, that were shown in total on Page 1 of Bateman
17 Exhibit 1 in Column 3. The totals of the columns shown on Line 41 of Page 3 are
18 the amounts carried forward to Column 3 of Page 1 of Bateman Exhibit 1. The
19 impact of the accounting and pro forma adjustments on rate base are shown on
20 Pages 4 – 4d of Bateman Exhibit 1.

1 **Q. PLEASE LIST THESE ACCOUNTING AND PRO FORMA**
 2 **ADJUSTMENTS.**

3 A. The accounting and pro forma adjustments that were made by the Company are as
 4 follows (the chart below indicates which witness is sponsoring each adjustment):¹

ADJUSTMENTS TO OPERATING REVENUES AND EXPENSES		
(Page 3 of BATEMAN EXHIBIT 1)		
Line No.	Adjustment Title	Witness
1	Annualize retail revenues for current rates	Wheeler
2	Update fuel costs to approved rate and other fuel related adjustments	Ward
3	Adjust other revenue	Wheeler
4	OPEN	N/A
5	Eliminate unbilled revenues	Bateman
6	Adjust for costs recovered through non-fuel riders	Bateman
7	OPEN	N/A
8	Annualize depreciation on year end plant balances	Bateman
9	Annualize property taxes on year end plant balances	Bateman
10	Adjust for new depreciation rates	Bateman
11	Adjust for post test year additions to plant in service	Bateman
12	Remove NCEMPA Acquisition Adjustment	Bateman
13	Remove expiring amortization credits from test year	Bateman
14	OPEN	
15	Adjust reserve for end of life nuclear costs	Bateman
16	Adjust coal inventory	Bateman
17	Adjust for previously deferred amounts - Harris COLA, GridSouth, Fukushima/Cybersecurity, 2014 Storms	Bateman
18	Amortize deferred environmental costs	Bateman
19	Amortize deferred cost balance related to SC AMI	Bateman
20	Normalize for storm costs	Bateman
21	Annualize O&M non-labor expenses	Bateman
22	Normalize O&M labor expenses	Bateman
23	Update benefits costs	Bateman
24	Levelize nuclear refueling outage costs	Bateman

¹ DE Progress intentionally left certain pro forma adjustment line numbers in an “Open” status to keep similar pro forma adjustment line numbers the same between the Company and DE Carolinas’ concurrent rate cases to allow for easy comparison.

ADJUSTMENTS TO OPERATING REVENUES AND EXPENSES		
(Page 3 of BATEMAN EXHIBIT 1)		
Line No.	Adjustment Title	Witness
25	Amortize rate case costs	Bateman
26	Adjust aviation expenses	Bateman
27	OPEN	N/A
28	Adjust for credit card fees	Bateman
29	Adjust O&M for executive compensation	Bateman
30	Adjust for Customer Connect additional expense and deferral	Bateman
31	Adjust vegetation management expenses	Bateman
32	Synchronize interest expense with end of period rate base	Bateman
33	Adjust 1/8 O&M for accounting and pro-forma adjustments	Bateman
34	Adjust for Federal tax rate change	Bateman
35	Adjust deferred cost balance related to SC Grid	Bateman

1 **Q. IN CALCULATING THE TOTAL REVENUE REQUIREMENT IN THIS**
2 **PROCEEDING, DID YOU REVIEW EACH OF THE ACCOUNTING AND**
3 **PRO FORMA ADJUSTMENTS?**

4 A. Yes, I did.

5 **Q. IN YOUR OPINION, DO THESE ACCOUNTING AND PRO FORMA**
6 **ADJUSTMENTS REFLECT KNOWN AND MEASURABLE CHANGES**
7 **TO THE COMPANY'S TEST PERIOD OPERATING EXPENSES,**
8 **REVENUES, AND RATE BASE?**

9 A. Yes. The adjustments set forth on page 3 of Bateman Exhibit 1, as more fully
10 supported below and in the testimony of Witnesses Ward and Wheeler, reflect
11 known and measurable changes to the Company's Test Period revenues,
12 expenses, and rate base. Adjustments that contain projections through December
13 31, 2018 may be updated with actual results prior to the hearing.

1 **Q. PLEASE DESCRIBE THE PRO FORMA ADJUSTMENTS.**

2 **A.** The following are descriptions of the pro forma adjustments:

3 **1. Annualize retail revenues for current rates**

4 This adjustment annualizes revenue based on the rates in effect at the time of the
5 application, excluding the Distributed Energy Resources Program (“DERP”)
6 revenues recovered in the fuel rider, and removes revenues recovered through the
7 Demand Side Management/Energy Efficiency (“DSM/EE”) rider. This
8 adjustment is discussed in more detail in the testimony of Witness Wheeler.

9 **2. Update fuel costs to approved rate and other fuel related adjustments**

10 This adjustment adjusts fuel clause expense during the Test Period to match the
11 fuel clause revenues included in Adjustment Line 1. By matching the expenses to
12 the revenue, the adjustment ensures that no increase is requested in this
13 proceeding related to fuel and fuel-related expenses that are recoverable through
14 the fuel clause. However, certain DERP expenses that are not readily identifiable
15 in the general ledger are eliminated by including an offsetting revenue adjustment
16 to keep the DERP incremental cost neutral in this case. This adjustment is
17 described in more detail in Witness Ward’s testimony.

18 **3. Adjust other revenue**

19 This adjustment adjusts other revenue to reflect proposed changes to rates in the
20 Company's Service Regulations and Rider MROP. The proposed changes are
21 discussed further in Witness Wheeler's testimony.

22 **4. N/A**

1 **5. Eliminate unbilled revenues**

2 This adjustment eliminates unbilled revenue and related taxes recorded by the
3 Company in the Test Period.

4 **6. Eliminate costs recovered through non-fuel riders**

5 This adjustment removes expense and rate base items recovered through the
6 DSM/EE rider, including the costs of the Distribution System Demand Response
7 (“DSDR”) program. The revenues, expenses and rate base items in this rider are
8 reviewed each year in annual proceeding and should not impact the increase
9 requested in this proceeding.

10 **7. N/A**

11 **8. Annualize depreciation on year end plant balances**

12 This adjustment reflects the annualization of depreciation expense using the
13 depreciation rates in effect at the end of the Test Period applied to the end of the
14 Test Period level of plant in service. During the Test Period, the Company
15 recorded depreciation for plant additions from the point in time when they went
16 into service. This adjustment annualizes depreciation expenses to reflect a full
17 year level of depreciation on plant in service as of the end of the Test Period using
18 the depreciation rates that were in effect during the Test Period.

19 **9. Annualize property taxes on year end plant balances**

20 This adjustment annualizes Test Period property taxes on plant in service at
21 December 31, 2017. Property taxes expensed in calendar year 2017 were
22 assessed based on property balances at the end of 2016. Likewise, property taxes
23 expensed in calendar year 2018 will be assessed based on property balances at the

1 end of 2017. This adjustment increases property tax expense in the Test Period to
2 reflect an annual level of expense for property taxes based on the end of the Test
3 Period level of plant investment.

4 **10. Adjust for new depreciation rates**

5 DE Progress filed a petition with the Commission in Docket 2018-204-E for
6 approval of new depreciation rates effective March 16, 2018. Witness Doss
7 discusses the study in more detail. The Company also filed a petition in Docket
8 2018-205-E requesting permission to defer, among other costs, the increases in
9 expense resulting from the new depreciation rates. The Commission approved
10 both requests on July 25, 2018. This adjustment adjusts the annualized
11 depreciation expense to reflect the new, approved depreciation rates and
12 amortizes the deferred balance over a 3-year period. The adjustment also
13 increases depreciation reserves by one year's worth of the depreciation and
14 amortization expense adjustment. The increase in depreciation expense is \$6.7
15 million, the amortization of the deferred costs is \$2.7 million. The two increases
16 are partially offset by the decrease in return on rate base of \$0.2 million, for a net
17 increase in revenue requirements of \$9.2 million.

18 Originally, the depreciation consultant, Gannett Fleming, had proposed
19 new depreciation rates that would fully depreciate the Asheville coal plant by its
20 expected retirement date in 2020. In order, to mitigate the impact on customers,
21 DE Progress asked the consultant to adjust the rates to reflect a recovery of the
22 remaining net book value of the Asheville coal plant over a ten-year period,
23 similar to the treatment of other coal plants that were retired early in DE Progress'

1 prior depreciation study. Since under this approach, the net book value of the
2 plant will not be fully recovered at the time of retirement, the Company is
3 requesting permission to establish and include in rate base a regulatory asset at the
4 time of the plant's retirement for the remaining net book value and the ability to
5 continue amortizing the costs over the remaining portion of the ten-year period at
6 that time. We also request permission to defer to this regulatory asset any costs
7 related to obsolete inventory, net of salvage, at the time of retirement.

8 **11. Adjust for post test year additions to plant in service**

9 This adjustment increases operating expenses and rate base for significant
10 production, transmission, distribution, general and intangible plant additions the
11 Company has incurred and will incur from the end of the Test Period through
12 December 2018. Witnesses Henderson, Miller, Oliver, Hunsicker and Schneider
13 discuss these plant additions in their testimonies.

14 **12. Remove NCEMPA Acquisition Adjustment**

15 In DE Progress's last general rate case, the Company agreed in settlement to
16 remove the cost of the acquisition adjustment resulting from the Company's
17 purchase of joint owner assets from North Carolina Electric Municipal Power
18 Agency ("NCEMPA"). This adjustment removes that acquisition adjustment
19 from the cost of service.

20 **13. Remove expiring amortization credits from test year**

21 This adjustment removes two expired amortizations from the Test Period. First,
22 in DEP's last general rate case, the commission order approved the reversal \$18.5
23 million of cost of removal for one year. This was recorded as a reduction to

1 depreciation and amortization expense during the Test Period. Because this
2 reversal is not ongoing, this adjustment removes it from the Test Period. The
3 impact of this adjustment is already reflected in current rates annualized due to
4 the rate increase implemented January 1, 2018. Second, in DEP's last general rate
5 case, DEP began amortizing over a two-year period the return of a deferred tax
6 liability, excess deferred income taxes ("EDIT"), resulting from the changes in
7 the North Carolina state income tax change. Because the amortization will not
8 continue after new rates are effective in this case, this adjustment removes the
9 amortization credit from the Test Period. This change results in an increase in
10 revenue requirements of \$12.4 million.

11 **14. N/A**

12 **15. Adjust reserve for end-of-life nuclear costs**

13 This adjustment adjusts depreciation and amortization expenses in order to
14 establish a reserve for end-of-life nuclear costs. There are some end-of-life costs
15 at a nuclear plant that are not captured in a decommissioning study. One example
16 of this is the expense to write off the materials and supplies in inventory at the
17 time of decommissioning that have little or no salvage value. The Company is
18 proposing to create a reserve to start accruing for these end-of-life expenses for
19 obsolete materials and supplies and, therefore, create a better matching of cost and
20 benefit for ratemaking purposes. The annual accrual amount will be determined
21 by dividing the projected inventory balance at the end of each unit's life by the
22 number of years remaining in the unit's life and summing this result for the
23 Company's three nuclear plants. In this proceeding, the Company is requesting

1 an annual accrual amount of approximately \$2.2 million as allocated to South
2 Carolina retail. The annual accrual amount can be reviewed and adjusted, if
3 needed, in each future general rate case before the end of the plant's life. The
4 reserve, once it is created, will be included as an offset to rate base in the cost of
5 service, and the pro forma decreases rate base to reflect one year's worth of the
6 accrual.

7 The Company is also proposing to create a reserve to start accruing for the
8 expense related to a portion of the last core of nuclear fuel in the reactor at the
9 end-of-life of its nuclear generating plants and, therefore, create a better matching
10 of cost and benefit for ratemaking purposes. The annual accrual amount will be
11 determined by dividing the projected remaining value of the last core of nuclear
12 fuel at the end of each unit's life by the number of years remaining in the unit's
13 life and summing this result for the Company's three nuclear plants. In this
14 proceeding, the Company is requesting an annual accrual amount of \$0.7 million
15 as allocated to South Carolina retail. The annual accrual amount can be reviewed
16 and adjusted, if needed, in each future general rate case before the end of the
17 plant's life. The reserve, once it is created, will be included as an offset to rate
18 base in the cost of service, and the pro forma decreases rate base to reflect one
19 year's worth of the accrual.

20 **16. Adjust coal inventory**

21 This adjustment reduces the Company's actual coal inventory at the end of the
22 Test Period to reflect a targeted 40-day full load burn for each of the coal

1 generating plants. This change in coal inventory for the South Carolina retail
2 jurisdiction is shown on Bateman Exhibit 1, Page 4c, Line 1, Column 3.

3 **17. Adjust for previously deferred amounts - Harris COLA,**
4 **Fukushima/Cybersecurity, 2014 storms, and GridSouth**

5 The deferral begins amortization for three different deferred balances and
6 addresses a fourth deferred balance all of which existed at the time of DEP's last
7 South Carolina general rate case, but of which the Company chose not to begin
8 amortization at that time in order to mitigate the customer rate impacts.

- 9 • Harris COLA – In Docket No. 2013-472-E, the Company requested and
10 the Commission approved deferral of costs related to the Harris Units 2
11 and 3 Combined Operating License Application (“COLA”).² This
12 adjustment amortizes the South Carolina retail deferred balance of \$6.7
13 million over a 5-year period.
- 14 • In the same docket, the Company requested and the Commission approved
15 deferral of costs related to compliance with Nuclear Regulatory
16 Commission (“NRC”) requirements in response to events at the
17 Fukushima Daiichi Nuclear Power Station in Japan in March 2011 and
18 NRC requirements related to cyber security. This adjustment amortizes
19 the South Carolina retail deferred balance of \$5.5 million over a 5-year
20 period.

² The Shearon Harris Units 2 and 3 Combined License Application remains in suspended review status at the Nuclear Regulatory Commission and DE Progress is considering withdrawal.

- 1 • In Docket 2001-139-E, the Company, along with other utilities in the state,
2 filed a notice of application to form a Regional Transmission
3 Organization, GridSouth, and then filed a notice withdrawing the
4 application. The associated deferred costs have been included in the
5 Company's rate base since that time. This adjustment amortizes the South
6 Carolina retail deferred balance of \$3.7 million over a 5-year period.
- 7 • In Docket 2014-482-E, the Company requested and the Commission
8 approved deferral of costs related to extreme storm events in the first
9 quarter of 2014. This adjustment removes the South Carolina retail
10 deferred balance from rate base. The Company is instead requesting to
11 accrue a return on the deferred balance while it explores alternative cost
12 recovery options for the significant storm costs incurred by the Company
13 over the last five years. This proposal is discussed in more detail later in
14 my testimony.

15 **18. Amortize deferred environmental costs**

16 In DEP's last rate case, Docket 2016-227-E, the Commission approved the
17 ongoing deferral of certain costs incurred in connection with compliance with
18 federal and state environmental requirements as it relates to Coal Combustion
19 Residuals ("CCRs" or "coal ash"). The nature of these costs is described in more
20 detail in Witness Kerin's testimony. No fines, penalties, or costs on which DE
21 Progress has agreed to forego recovery are included in the deferral. This
22 adjustment amortizes the deferred costs over a 5-year period. While the costs to
23 comply with CAMA and the CCR Rule are largely duplicative, there are a small

1 portion of the costs that the Company has determined are specific to CAMA,
2 unique to North Carolina and appropriate for direct assignment to North Carolina,
3 as discussed by Witness Kerin. As previously referenced, the deferral calculation
4 nets the total compliance costs allocated to South Carolina retail with the cost of
5 removal that is being collected from customers up through the effective date of
6 the new depreciation rates. After that point, the amounts were netted in the
7 deferral of incremental depreciation expense. Some of the deferred compliance
8 costs are related to ash basin closure and are subject to asset retirement obligation
9 (“ARO”) accounting per Generally Accepted Accounting Principles (“GAAP”).
10 Some of the deferred compliance costs are related to the continued operation of
11 the active plants and are not subject to ARO accounting, and instead are
12 capitalized to plant in service. The deferred compliance costs included in this
13 case are the costs after the cut-off in the last rate case, June 30, 2016, through the
14 cut-off in this case, December 31, 2018, with the October 1, 2018 – December 31,
15 2018 period still based on a projection as of the time of the filing. The total
16 system spend on coal ash basin closure costs during this period (July 2016
17 through December 2018) for DE Progress is \$526.4 million. After applying
18 allocations factors, netting with the cost of removal and incorporating the return
19 on the deferred costs through the expected date on new rates in this case, the
20 expected deferred balance as of May 31, 2019, on a South Carolina retail basis is
21 \$50.8 million. The Company then subtracted \$1.5 million from the balance to
22 exclude the South Carolina retail portion of an amount that the North Carolina
23 commission disallowed for prudence reasons. While the two commissions may

1 make differently rulings on what is deemed prudent and recoverable, the
2 Company has decided not to seek this amount in South Carolina. After this
3 subtraction, the remaining deferred balance is \$49.3 million. The total system
4 compliance amounts placed in service related to continued operations at active
5 plants through December 2018, are \$171.7 million. The deferred depreciation and
6 return on these investments results in an additional deferred balance on a South
7 Carolina retail basis of \$1.1 million, for a total deferred balance of \$50.4 million.
8 Over the 5-year amortization period, the annual amortization expense is \$10.1
9 million. When added together with the net-of-tax return on the unamortized
10 balance of \$2.8 million, the total annual revenue requirement requested in this
11 case for deferred CCR compliance costs is \$12.9 million. The Company expects
12 to continue to invest significant amounts related to coal ash compliance after the
13 December 2018 cut-off in this case. Instead of requesting recovery of an ongoing
14 level of these costs in this case, the Company is requesting the Commission
15 approve a continuation of the deferral, similar to what it approved in Docket
16 2016-227-E, for costs not included in this case. Specifically, the Company is
17 requesting approval to defer CCR compliance spend related to ash basin closure
18 beginning January 1, 2019, the depreciation and return on CCR compliance
19 investments related to continued plant operations placed in service on or after
20 January 1, 2019, and a return on both deferred balances at the overall rate of
21 return approved in this case.

1 **19. Amortize deferred cost balance related to SC AMI**

2 In Docket 2018-205-E, the Company petitioned for approval to defer into a
3 regulatory asset account the incremental O&M expense and the depreciation
4 expense incurred once the Advanced Metering Infrastructure technology (“AMI”)
5 meters are installed, as well as the associated carrying costs on the investment and
6 deferred costs at its weighted average cost of capital. The Commission approved
7 the Company's petition on July 25, 2018. Witness Schneider discusses the AMI
8 deployment in more detail. The total projected deferred costs are \$1.4 million on
9 a South Carolina retail basis. This adjustment amortizes the deferred balance over
10 a 3-year period, resulting in an annual revenue requirement of \$0.5 million. The
11 Company is also requesting permission to establish a regulatory asset/liability and
12 defer to this account the incremental O&M and depreciation expense associated
13 with ongoing AMI deployment, including the carrying cost on the investment and
14 on the deferred costs at the weighted average cost of capital approved in this case.
15 As described in Witness Schneider’s testimony, as of September 2018, DE
16 Progress has installed approximately 38,000 smart meters, and the next phases of
17 deployment will replace the Company’s remaining approximately 128,000 older
18 technology meters with AMI meters. Without the accounting treatment requested
19 by the Company, these costs will impact the Company’s financials on a meter by
20 meter basis through the deployment program; accordingly, unlike capital projects
21 of similar financial magnitude, the Company will not recover its time value of
22 money in the form of allowance for funds used during construction. Instead, the
23 Company’s earnings are impacted every time a meter is installed as it creates an

1 instant degradation to the Company's financials. This deferral will allow the
2 Company to bridge this timing gap until the Company's next rate case while
3 installing technology that will enable the customer benefits described by Witness
4 Schneider. Since the amortization proposed in this adjustment only includes
5 meters placed in service through December 31, 2018, the Company requests to
6 defer to the regulatory asset costs for meters placed in service on or after January
7 1, 2019.

8 **20. Normalize for storm costs**

9 This pro forma adjustment normalizes storm restoration costs to an average level
10 of costs the Company has experienced over the last ten years. The ten-year
11 average excludes the unusual storms for which the Company has requested and
12 received deferral accounting treatment, the 2014 ice storm and winter storm Pax
13 and Hurricane Matthew.

14 **21. Annualize O&M non-labor expenses**

15 This adjustment annualizes Test Period operating and maintenance expenses
16 excluding fuel, purchased power, and labor costs to reflect the change in unit
17 costs that occurred during this period.

18 **22. Normalize O&M labor expenses**

19 This adjustment adjusts the wages and salaries and related employee benefits
20 costs to reflect annual levels of costs as of July 1, 2018. This adjustment also
21 reflects changes in related payroll taxes.

1 **23. Update benefits costs**

2 This adjustment updates the Test Period cost of labor-related benefits to match the
3 result of an updated study performed by the Company's consultants. This
4 adjustment also removes benefits related amortizations that expired at the end of
5 2017.

6 **24. Levelize nuclear refueling outage costs**

7 In the Company's last general rate case, the Commission approved an accounting
8 mechanism that levelized certain costs related to nuclear refueling outages. This
9 adjustment annualizes the amortization expense related to this mechanism
10 incurred during the Test Period to the level experienced at the end of the Test
11 Period.

12 **25. Amortize rate case costs**

13 This adjustment amortizes the incremental rate case costs incurred for this docket
14 over a 5-year period.

15 **26. Adjust aviation expenses**

16 This adjustment removes 50 percent of the corporate related aviation expenses
17 allocated to DE Progress in the Test Period that are not related to aerial patrol.

18 While the Company believes these costs are reasonable, prudent and appropriate
19 to recover from customers, we have-for purposes of this case-made an adjustment
20 to this item.

21 **27. N/A**

1 **28. Adjust for credit card fees**

2 Currently, customers who pay their electric bill by credit card, debit card or ACH
3 are required to pay a fee of \$1.50 per transaction to the third party who processes
4 these payments. As described in the testimony of Witness Ghartey-Tagoe, the
5 Company is now proposing to implement a fee-free credit/debit card program that
6 would allow residential customers to utilize their credit cards or debit cards to pay
7 their utility bills without paying a surcharge or convenience fee, and instead for
8 the Company to pay these costs to the third party and recover the cost from all
9 customers as part of its cost of service. This adjustment increases operating and
10 maintenance expense by \$0.8 million to reflect this cost including the growth in
11 number of transactions expected as a result of this change.

12 **29. Adjust O&M for executive compensation**

13 This adjustment removes 50 percent of the compensation of the four Duke Energy
14 executives with the highest level of compensation allocated to DE Progress in the
15 Test Period. While the Company believes these costs are reasonable, prudent and
16 appropriate to recover from customers, we have, for purposes of this case, made
17 an adjustment to this item.

18 **30. Adjust for Customer Connect Project**

19 This adjustment increases Test Period O&M related to the Company's Customer
20 Connect project and amortized the deferred balance over a 3-year period. The
21 Customer Connect project will replace the Company's current billing system and
22 is currently planned to be placed in service in 2021. The project is described in
23 more detail in the testimony of Witness Hunsicker. Due to the nature of the

1 project costs, a significant amount of the spending between now and the in-
2 service date will be O&M. This adjustment increases Test Period O&M by \$1.2
3 million (from \$0.2 million to \$1.4 million), which is the average incremental level
4 on a South Carolina retail basis expected over the next two years. These
5 estimates are based on signed contracts for the primary software, systems
6 integration and change management professional services, that resulted from an
7 extensive request for proposal process conducted in 2016. This increase in O&M
8 plus the amortization expense of \$0.5 million and a return on the deferred balance
9 of \$0.1 million equal a combined revenue increase for this adjustment of \$1.8
10 million.

11 **31. Adjust vegetation management expenses**

12 This adjustment normalizes vegetation management expenses by adjusting for
13 known changes in program cycle times and contract costs.

14 **32. Synchronize interest expense with end of period rate base**

15 This adjustment adjusts income taxes for the tax effect of the annualization of
16 interest expense reflected in the pro forma cost of service.

17 **33. Adjust 1/8 O&M for accounting and pro-forma adjustments**

18 This adjustment adjusts the Company's rate base to include the additional
19 working capital required as a result of the additional O&M expenses the Company
20 is proposing in this proceeding as shown on Line 2, Column 3 of Bateman Exhibit
21 1, Page 4d.

1 **34. Adjust for tax rate change**

2 Witness Panizza discusses the Tax Cuts and Jobs Act (the “Tax Act”), which
3 became law on December 22, 2017. One change he discusses from the Tax Act is
4 the reduction in the corporate income tax rate from 35 to 21 percent. This
5 adjustment reduces the Test Period income tax expense to reflect this change.
6 The adjustment also reduces accumulate deferred income taxes for one year’s
7 worth of the deferred income tax expense adjustment. The net result of this
8 adjustment is a reduction in revenue requirement for customers of \$17.0 million.
9 In addition to impacting tax expense, the reduction in the corporate income tax
10 rate also impacts the levelized amortizations established in the last rate case
11 (Lines 23, 24, 26, and 28 of Settlement Agreement Attachment A). Because the
12 tax rate is now lower, the after-tax rate of return is higher, which would result in
13 an increase in the levelized amortization expense. Instead of proposing to
14 increase the amortization expense in this case, the Company is proposing to keep
15 the amortization expense equal to the amount established in the last rate case.
16 This will result in a longer amortization period than was anticipated in that case.
17 Other impacts of the Tax Act and benefits for customers are described later in my
18 testimony.

19 **35. Grid Improvement Plan Deferral**

20 In Docket 2018-206-E, the Company requested and the Commission approved
21 deferral of costs related to the Company’s Grid Improvement Plan. In 2018, the
22 Company has, or will by December, place in service investments of \$17.6 million
23 on a South Carolina retail basis. The deferral of the depreciation, O&M, property

1 tax, and return on these investments plus the return on deferred balance results in
2 a deferred balance as of May 31, 2019 of \$2.3 million. This adjustment amortizes
3 this deferred balance over a two-year period for a revenue requirement impact of
4 \$1.2 million for this adjustment. I discuss the proposed recovery for investments
5 under the Grid Improvement Plan placed in service after December 2018 later in
6 my testimony.

7 **Q. PLEASE EXPLAIN WHAT IS PRESENTED ON PAGES 4 THROUGH 4d**
8 **OF BATEMAN EXHIBIT 1.**

9 A. Page 4 shows total Company and South Carolina retail components of original
10 cost rate base. The total Company amounts and South Carolina retail components
11 were taken from the Company's Cost of Service Study as of December 31, 2017.

12 Pages 4a, 4b, 4c, and 4d are details of components making up original cost
13 rate base as of December 31, 2017 adjusted for known and measurable changes.
14 On each of these four pages, Column 1 shows the total Company per book
15 amounts at December 31, 2017; Column 2 reflects the amount for South Carolina
16 retail electric operations; Column 3 sets forth the accounting adjustments
17 allocated to South Carolina retail operations; and Column 4 reflects the South
18 Carolina retail amounts including adjustments.

19 Page 4a is a summary of the Company's investment in electric plant in
20 service as of December 31, 2017 by functional classification. Page 4b details
21 accumulated depreciation and amortization for each of the classes of electric plant
22 in service. The composite depreciation rates based on end of 2017 plant balances
23 for each class of property are shown at the bottom of the page on Lines 8 through

15. The depreciation rates underlying these composite calculations were approved by the Commission on July 25, 2018 in Docket 2018-204-E and are supported by Witness Doss. Page 4c is a summary of the Company's investment in materials and supplies as of December 31, 2017 included in rate base. Page 4d reflects the working capital investment included in rate base.

V. EXCESS DEFERRED INCOME TAX ("EDIT") RIDER

Q. PLEASE EXPLAIN THE COMPANY'S PROPOSED EDIT RIDER.

A. Witness Panizza discusses the Tax Act, which became law on December 22, 2017. Earlier in my testimony, I described how the Company has incorporated into the base rate revenue requirements in this case the reduction in the corporate income tax rate from 35 to 21 percent. For the remaining benefits of the Tax Act, the Company is proposing to create an EDIT rider. Bateman Exhibit 3 shows the Year 1 calculation of this rider, and then shows for illustrative purposes how the rider would be calculated in future years. The rider contains the following five categories of benefits for customers:

1. Federal EDIT - Protected
2. Federal EDIT – Unprotected, PP&E related
3. Federal EDIT – Unprotected, non PP&E related
4. Deferred Revenue
5. NC EDIT

Federal EDIT – Protected, Unprotected PP&E related, and Unprotected, non PP&E related

1 At the end of 2017, the company had a certain amount of Accumulated Deferred
2 Income Taxes (“ADIT”) on its balance sheet. These are income taxes which the
3 Company has expensed for accounting purposes, but for which the Company will
4 not need to pay the Internal Revenue Service (“IRS”) until some point in the
5 future. Because the Company has use of the cash until it has to pay the IRS, the
6 ADIT is included as a reduction to rate base and is basically used as a source of
7 financing for investments used to benefit customers – poles, lines, generation
8 plant investments, etc. With the change in the federal tax rate, the amount that the
9 Company must pay to the IRS in the future for these ADIT obligations has been
10 reduced. At the end of 2017, the Company calculated this reduction and the
11 difference was carved out and stayed on the balance sheet, and in rate base, as
12 EDIT. Instead of having an obligation to pay this money to the IRS in the future,
13 the Company now has an obligation to pay it to customers. However, since the
14 money is currently being used to finance investments benefitting customers, as the
15 Company pays the money to customers, it must find other sources of financing for
16 these investments. If the money is returned to customers too quickly, it can put
17 pressure on the Company’s credit metrics and create rate volatility for customers.
18 Within EDIT, there are three subcategories.

- 19 • Protected – These amounts are generally related to Property, Plant &
20 Equipment (PP&E) and there are specific IRS requirements that require
21 that this amount be returned to customers no more quickly than the
22 prescribed method. The amortization period the Company is using here is
23 called the Average Rate Assumption Method (“ARAM”) and results in a

1 Year 1 amortization rate for this category of 4.29 percent. Also, because
2 under this method, the Company would have been allowed to return a
3 certain amount of this category to customers in 2018, but did not, the
4 Company calculated the amount that could have been returned and moved
5 it into the Unprotected, non-PP&E related category. This is shown on
6 Line 2 of Bateman Exhibit 3, Page 1.

- 7 • Unprotected PP&E related – These amounts are also related to PP&E but
8 do not fall under the federal guidelines for protected status. Because the
9 Company would have paid these amounts to the IRS over the remaining
10 life of the underlying property, the Company is proposing to return these
11 amounts to customers over a 20-year period.
- 12 • Unprotected non PP&E related – These amounts are not related to
13 property and instead are related to items such as regulatory assets and
14 liabilities, and other balance sheet items, and also include the amount
15 transferred from the Protected category. The Company is proposing to
16 return these amounts to customers over a 5-year period.

17 Deferred Revenue

18 As directed in Docket 2017-381-A, the Company began deferring effective
19 January 1, 2018, the impact on customer rates of the reduction in the federal
20 corporate income tax rate. Line 3 of Bateman Exhibit 3, Page 1, shows the
21 projected balance for this liability as of December 2018. The Company will
22 continue to defer the impact from January 1, 2019 through the new rates effective
23 date in this case. Those additional amounts are not known at this time, and will

1 be included in the Year 2 EDIT rider calculation. The Company has also netted
2 against the projected balance certain deferred balances related to the Distributed
3 Energy Resource Program (“DERP”). This offset is discussed further by Witness
4 Ghartey-Tagoe.

5 NC EDIT

6 Similar to the EDIT that results from the reduction in the federal corporate
7 income tax rate, there are EDIT balances that resulted from the reduction in the
8 North Carolina state corporate income tax rate. The Company began to return the
9 amounts to customers in the last rate case. In Docket 2018-205-E, the
10 Commission granted permission for the Company to continue recording the
11 amortization expense through no later than June 30, 2019. If new customer rates
12 are effective in this proceeding June 1, 2019, as requested by the Company, then
13 the amortization would stop May 31, 2019. The projected balance at that time is
14 expected to be less than \$1.0 million, as shown on Line 6 of Bateman Exhibit 3,
15 Page 1, and the Company is proposing to refund the full remaining balance to
16 customers in Year 1 of the EDIT rider.

17 **Q. PLEASE EXPLAIN HOW THESE FIVE CATEGORIES OF BENEFITS**
18 **WILL BE INCORPORATED INTO THE EDIT RIDER.**

19 A. The proposed rider will contain the amortization for each of these five categories
20 of benefits. These amounts can be seen in Columns B through G of Bateman
21 Exhibit 3, Page 2. As these amounts are refunded to customers, rate base will
22 increase. As such, the rider also calculates the return on the increased rate base
23 since the last rate case. This is shown in Column L of Bateman Exhibit 3, Page 2.

1 Column M shows the sum of the amortization and return, and Column N shows
2 the revenue requirement for the rider grossed up for license fee and the public
3 utility assessment fee. The amount in the Year 1 row on Bateman Exhibit 3, Page
4 2 of \$10.0 million decrease in revenue is the rider that is being proposed in this
5 case. Some of the balances used to create the Year 1 rider are as of the end of
6 2017 or projected end of 2018 balances. I will provide an updated version of this
7 exhibit with end of 2018 actual balances prior to the hearing. I will also update
8 the exhibit with whatever the latest known ARAM rate is at that time to avoid
9 possible normalization violations. Years 2 through 5 are shown for illustrative
10 purposes. However, the actual rider amounts for those years may change based
11 on several factors.

12 First, if there are additional adjustments to any of the balances on Rows 1
13 through 5 of Page 1 of the exhibit, the annual amortization amounts will be
14 recalculated to accommodate the change in balance. For example, the Company
15 will continue to defer revenue for the change in the federal income tax rate until
16 new rates effective in this case reflect the change. This additional deferred
17 balance is unknown at this time, but will be incorporated into the rider in
18 subsequent years.

19 A second factor that would impact the calculation of the rider beyond Year
20 1 is changes in the ARAM rate. The Company updates this rate annually and the
21 most current rate would be used when establishing customer rates.

22 A third factor that would impact the calculation of the rider beyond Year 1
23 is the impact of future rate cases. In future rate cases, the EDIT balance in base

1 rates shown in Column J and the rate of return used to calculate Column L of
2 Bateman Exhibit 3, Page 2 would be updated based what is approved in that case.

3 Finally, the retention factor used to calculate Column N will be updated to
4 reflect any future changes in the license fee or public utility assessment fee rates,
5 as needed.

6 The Company will propose to file the rider amounts, along with the
7 spread to the classes and derivation of the rate, for each subsequent year with the
8 Commission in this docket by March 31, for rider rates effective June 1.

9 Bateman Exhibit 2 shows how the EDIT rider revenue requirement will be
10 spread to the rate classes. Witness Hager explains how the amounts were
11 allocated to the customer classes in her testimony. The Year 1 rider revenue
12 requirements by rate class were provided to Witness Wheeler who explains the
13 derivation of the rider rate in his testimony.

14 **VI. GRID IMPROVEMENT PLAN REQUEST**

15 **Q. HAS THE COMPANY INCLUDED COSTS ASSOCIATED WITH THE**
16 **GRID IMPROVEMENT PLAN?**

17 A. Yes. The Company has included grid improvement investments, placed in service
18 through December 31, 2018, in the revenue requirement calculation show in
19 Bateman Exhibit 1. The revenue requirement on these investments is included in
20 Line 11, Adjust for post test year additions to plant in service, and Line 35,
21 Amortize deferred cost balance related to SC Grid, of my pro forma adjustments
22 shown on Bateman Exhibit 1, Page 3, and described earlier in my testimony.

1 **Q. HAS THE COMPANY SOUGHT ANY ADDITIONAL ACCOUNTING**
2 **AND RECOVERY METHODS FOR ONGOING GRID IMPROVEMENT**
3 **PLAN COSTS?**

4 A. Yes. The Company's application requests that the Commission approve the
5 Company's Grid Improvement Plan as described by Witness Oliver, along with
6 associated Phase 1 and Phase 2 rates effective June 1, 2020 and June 1, 2021.
7 Such Phase 1 and Phase 2 proposed rates, provided in Wheeler Direct Exhibit No.
8 6, serve as "step-ups" in base rates for the revenue requirement associated with
9 those investments to be approved in this case. Bateman Exhibit 4 shows the
10 calculation of the proposed Phase 1 and Phase 2 revenue requirements in more
11 detail. For investments under the plan placed in service from January 1, 2019
12 through December 31, 2019, the Company is proposing to capture the costs
13 associated with these investments in the Phase 1 rates, effective June 1, 2020, one
14 year after the rates effective date requested in this case. For investments under
15 the plan placed in service from January 1, 2020 through December 31, 2020, the
16 Company is proposing to capture the costs associated with these investments in
17 the Phase 2 rates, effective June 1, 2021, one year after the Phase 1 rates. As part
18 of this request, the Company seeks approval to defer costs associated with the
19 incremental grid improvement plan investments placed in service after December
20 31, 2018 until those costs are included base rates, either through the Phase 1 or 2
21 rates or a subsequent general rate case. The Phase 1 rates would also include
22 amortization of deferred costs associated with 2019 investments over a two-year
23 period. The Phase 2 rates would include amortization of deferred costs associated

1 with 2020 investments over a two-year period, and would also include a
2 decrement to remove what will then be the completed amortization for 2018
3 investments described in pro forma Line 35.

4 As to the deferral of cost incurred between rate effective dates, the
5 Company respectfully requests Commission approval to defer the financial effects
6 of the grid improvement plan work outlined by Witness Oliver, including
7 incremental O&M, depreciation expense and property tax, as well as the carrying
8 costs on the investment and on the deferred costs at each utility's weighted
9 average cost of capital, until the rates effective date of the Phase 1 and 2 rates,
10 effective June 1, 2020 and June 1, 2021, respectively, and then afterward until
11 the utility's next general rate case.

12 **Q. PLEASE EXPLAIN WAS IS SHOWN IN BATEMAN EXHIBIT 4.**

13 A. Page 1 of Bateman Exhibit 4 shows the revenue requirement for both the South
14 Carolina retail jurisdiction and by rate class for Phase 1 and Phase 2 on Lines 21
15 and 31, respectively. The revenue requirement increase in total for South
16 Carolina retail is \$5.1 million for Phase 1 and \$5.8 million for Phase 2.

17 Page 2 shows the derivation of the Phase 1 jurisdictional revenue requirement
18 including the amortization of the deferred balance for 2019 investments.

19 Page 3 shows the details of the deferral calculation for the 2019 investments,
20 including the plant in service, O&M and amortization amounts that carry forward
21 to Page 2.

22 Page 4 shows the derivation of the Phase 2 jurisdictional revenue requirement
23 including the amortization of the deferred balance for 2020 investments.

1 Page 5 shows the details of the deferral calculation for the 2020 investments,
2 including the plant in service, O&M and amortization amounts that carry forward
3 to Page 4.

4 Page 6 shows the system capital spend and O&M for 2019 and 2020 that
5 corresponds to the Grid Improvement Plan described by Witness Oliver. It also
6 shows the allocations to South Carolina retail and the assumptions for the lag
7 between when capital is spent and when assets are placed in service that was used
8 for the revenue requirement calculation. The numbers and assumptions on this
9 page are the basis for the detailed deferral calculations on Pages 3 and 5.

10 Page 7 shows the cost of capital requested in this case and used in the calculation
11 of the revenue requirements on Pages 2 through 5.

12 **Q. WOULD THE PARTIES HAVE A CHANCE TO REVIEW THE WORK**
13 **COMPLETED IN ADVANCE OF THE EFFECTIVE DATE OF NEW**
14 **RATES?**

15 A. Yes. The Company would be willing to file status reports to apprise stakeholders
16 of our progress as explained by Witness Oliver, as well as through an ORS
17 conducted audit.

18 **Q. IF APPROVED, WOULD THE COMPANY AGREE TO PUT FORTH THE**
19 **SAME INFORMATION FOR FUTURE YEARS?**

20 A. Yes. The Company envisions that expenditures for years outside of the Grid
21 Improvement Plan (not established in this case) be brought back before the
22 Commission through a process like this one for similar treatment.

1 **Q. PLEASE DESCRIBE THE ORS AUDIT REFERENCED ABOVE?**

2 A. The Company proposes that the audit by ORS be conducted prior to the effective
3 date of the Phase 1 and 2 rates to be approved in this case. Accordingly, we
4 recommend the following parameters for an audit:

- 5 • By March 1 of 2020 and 2021, the Company will file an updated version
6 of Bateman Exhibit 4 showing the actual grid improvement plan balances
7 placed in service and incremental O&M by month during the prior
8 calendar year. The Company will certify that these plant in service and
9 O&M amounts are part of the Grid Improvement Plan described by
10 Witness Oliver, and are ready to be audited. The Company will also
11 include a narrative explaining the work completed and the status of the
12 plan.
- 13 ▪ The ORS should audit the plant in service balances and confirm whether
14 the Company has indeed placed in service the amounts included in the
15 updated Bateman Exhibit 4 and spent the incremental O&M and that these
16 were investments under the Commission-approved Grid Improvement
17 Plan. The audit should be limited in scope and not a recreation of the rate
18 case (return on equity, cost allocation, etc.) or an examination of the
19 appropriateness of the Grid Improvement Plan.
- 20 ▪ ORS should be given sixty (60) days from the date that the Company files
21 the updated Bateman Exhibit 4 to complete its audit and file a report with
22 the Commission on May 1.
- 23 ▪ When ORS certifies to the Commission by May 1 that the Company has
24 met the conditions above, the Phase 1 and 2 rates should be placed into
25 effect for service on or after June 1.

26
27
28
29
30
31 **Q. WHAT HAPPENS IF THE ACTUAL INVESTMENTS RESULT IN A**
32 **REVENUE REQUIREMENT LESS THAN THE AMOUNT SHOWN IN**
33 **BATEMAN EXHIBIT 4?**

34 A. With its March 1, 2020 and March 1, 2021 certifications, the Company will
35 include an update version of Bateman Exhibit 4 with the actual investments
36 placed in service in the prior calendar year. If the update results in a lower

revenue requirement, the approved step-up rates will be reduced to reflect the lower revenue requirement. If the update results in a higher revenue requirement, the approved step-up rates will not change, and the difference will be deferred to be considered in a future general rate case. As a result, the Phase 1 and Phase 2 rate changes will be no greater than the amounts approved in this case; however, they could be less.

VII. STORM COSTS REQUEST

Q. IS THE COMPANY SEEKING TO RECOVER COSTS FOR STORM RESTORATION IN THIS CASE?

A. No. DE Progress has incurred significant storm restoration in its South Carolina service territory costs over the last five years. The Company has requested and received deferral for two 2014 storms (Docket 2014-482-E) and for Hurricane Matthew (2016-408-E). The table below shows the deferred balance as of the end of September 30, 2018 for each currently approved South Carolina retail deferral.

Storm	Deferred Balance as of September 30, 2018
2014 Ice Event & Winter Storm Pax	\$14.7
Hurricane Matthew	\$66.0
Total	\$80.7

The Company was granted permission to defer a return on the deferred balance for Hurricane Matthew and is currently doing so. The Company proposes not to begin amortization of the balances in this case, but instead continue to defer the return after the rates effective date in this case, and update the overall weighted average cost of capital used in the calculation once the Commission issues a final

1 order in this docket. The deferred balance for the 2014 storms was included in
2 rate base in the Company's last rate case. Earlier in my testimony, I described the
3 pro forma that removes this balance from rate base. Consequently, the Company
4 is requesting to begin deferring a return on the deferred balance, at the overall
5 weighted average cost of capital approved in this case, for the 2014 storms
6 beginning with new rates effective in this case.

7 In a similar manner, the Company will soon file a petition requesting
8 deferral for significant costs incurred this year in connection with Hurricane
9 Florence and Hurricane Michael and plans to seek the same accounting treatment
10 for these costs as described above, namely a return at the overall weighted
11 average cost of capital, and no amortization.

12 The Company plans to explore alternative options for recovery of these
13 deferred balances for the storms described above. If the Company is unable to
14 secure a suitable, alternative recovery mechanism that results in customer savings,
15 then the Company, at that point, will need to seek recovery through more
16 traditional mechanisms in a future rate case.

V. CONCLUSION

Q. IN YOUR VIEW, ARE OPERATING EXPENSES AND RATE BASE CALCULATED BY DUKE ENERGY PROGRESS IN THIS PROCEEDING IN ACCORDANCE WITH THE PROVISIONS OF S.C. CODE ANN. SECTIONS 58-27-820 AND 58-27-870 AND 26 S.C. CODE REGS. 103-303 AND 103-823?

A. Yes, they are. The Company generally experienced a level of ordinary business expenses and rate base that was reasonable and necessary to provide safe and reliable electric service to its customers for the twelve-month period ending December 31, 2017. In order to meet the requirements of S.C. Code Ann. Sections 58-27-820 and 58-27-870 and 26 S.C. Code Regs. 103-103 and 103-823, the actual operating expenses and rate base levels for the Test Period were adjusted for known and measurable changes as described above.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
OPERATING INCOME FROM ELECTRIC OPERATIONS
FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
(Thousands of Dollars)

Line No.	Description	Total Company Per Books (a) (Col. 1)	South Carolina Retail				After Proposed Increase (Col. 6)
			Per Books (Col. 2)	Accounting Adjustments (c) (Col. 3)	Before Proposed Increase (Col. 4)	Revenue and Expenses from Proposed Increase (e) (Col. 5)	
1	Electric operating revenue	\$ 5,125,685	\$ 562,188	\$ (1,452)	\$ 560,736	\$ 68,668	\$ 629,404
	Electric operating expenses:						
	Operation and maintenance:						
2	Fuel used in electric generation	1,258,015	125,387	15,903	141,290		141,290
3	Purchased power	351,214	52,856	-	52,856		52,856
4	Other operation and maintenance expense	1,355,516	145,738	(1,643)	144,095		144,095
5	Depreciation and amortization	762,731	75,968	59,352	135,320		135,320
6	General taxes	153,535	20,970	1,025	21,995	304	22,299
7	Interest on customer deposits	9,367 (b)	654	-	654		654
8	Net income taxes	336,771	35,368	(32,906)	2,462	17,057	19,519
9	Amortization of investment tax credit	(3,380)	(338)	-	(338)		(338)
10	Total electric operating expenses	4,223,770	456,604	41,731	498,334	17,361	515,695
11	Operating income	\$ 901,915	\$ 105,584	\$ (43,183)	\$ 62,402	\$ 51,307	\$ 113,709
12	Add: customer growth			17	17	14	\$ 31
13	Net operating income for return	\$ 901,915	\$ 105,584	\$ (43,166)	\$ 62,419	\$ 51,321	\$ 113,740
14	Original cost rate base (e)	\$ 13,624,810	\$ 1,388,456	\$ 133,207 (d)	\$ 1,521,662		\$ 1,521,662
15	Rate of return on South Carolina retail rate base		7.60%		4.10%		7.47%

Note: Proposed Increase on line 1 does not include impact of EDIT Rider reduction of (\$10M) in Year 1

Notes: (a) Per Cost of Service
(b) Reclassifies interest on customer deposits to electric operating expense.
(c) From Page 3, Line 41.
(d) From Page 4, Line10.
(e) From Page 2.

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
CALCULATION OF ADDITIONAL REVENUE REQUIREMENT
FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
(Thousands of Dollars)

Line No.	Description	Dec. 31, 2017 Amount (Col. 1)	Pro forma Ratio (Col. 2)	South Carolina Retail				
				Before Proposed Increase			After Proposed Increase	
				Retail Rate Base (Col. 3)	Embedded Cost/ Return % (Col. 4)	Operating Income (Col. 5)	Retail Rate Base (Col. 6)	Operating Income (Col. 8)
1	Long-term debt	\$ 7,257,297	47.00%	\$ 715,181	4.06%	\$ 29,059	\$ 715,181	\$ 29,059
2	Members' equity (a)	8,233,254	53.00%	806,481	4.14%	33,360	806,481	84,681
3	Total	\$ 15,490,551	100.00%	\$ 1,521,662 (b)		\$ 62,419 (c)	\$ 1,521,662 (b)	113,740
4	Operating income before increase (Line 3, Column 5)							\$ 62,419
5	Customer growth (d)							(d) 14
6	Operating income before increase							62,433
7	Additional operating income required (Line 3 minus Line 6)							51,307
8	Gross receipts taxes, utility assessment and income taxes							17,361
9	Additional revenue requirement							\$ 68,668

Notes: (a) The equivalent of common equity for a limited liability company.
(b) From Page 4, Line 10, Column 4.
(c) From Page 1, Line 13, Column 4.
(d) From Page 1, Line 12, Column 5

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
 DETAIL OF ACCOUNTING ADJUSTMENTS-SOUTH CAROLINA RETAIL
 FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
 (Thousands of Dollars)

Line No.	Description	Electric Operating Revenue (Col. 1)	Fuel Used in Electric Generation (Col. 2)	Purchased Power (Col. 3)	Other O&M Expense (Col. 4)	Depreciation and Amortization (Col. 5)	General Taxes (Col. 6)	Income Taxes 24.95% (Col. 7)	Amortization of ITC (Col. 8)
1	Annualize Retail revenues for current rates	\$ 590	\$ -	\$ -	\$ 1	\$ -	\$ 2	\$ 147	\$ -
2	Update fuel costs to approved rate and other fuel related adjustments	397	15,903	-	-	-	-	(3,869)	-
3	Adjust Other Revenue	68	-	-	0	-	0	17	-
4	OPEN								
5	Eliminate unbilled revenues	(2,508)	-	-	-	-	(8)	(624)	-
6	Adjust for costs recovered through non-fuel riders	-	-	-	(16,361)	(6,161)	(603)	5,770	-
7	OPEN								
8	Annualize Depreciation on year end plant balances	-	-	-	-	2,801	-	(699)	-
9	Annualize property taxes on year end plant balances	-	-	-	-	-	376	(94)	-
10	Adjust for new depreciation rates	-	-	-	-	9,386	-	(2,342)	-
11	Adjust for post test year additions to plant in service	-	-	-	-	5,327	1,079	(1,598)	-
12	Remove NCEMPA Acquisition Adjustment	-	-	-	-	(1,218)	-	304	-
13	Remove expiring amortization credits from test year	-	-	-	-	30,869	-	(7,702)	-
14	OPEN								
15	Adjust reserve for end of life nuclear costs	-	-	-	-	2,938	-	(733)	-
16	Adjust coal inventory	-	-	-	-	-	-	-	-
17	Adjust for previously deferred amounts - Harris COLA, GridSouth,Fukushima/Cybersecurity, 2014 Storms	-	-	-	-	3,184	-	(794)	-
18	Amortize deferred environmental costs	-	-	-	-	10,080	-	(2,515)	-
19	Amortize deferred cost balance related to SC AMI	-	-	-	-	468	-	(117)	-
20	Normalize for storm costs	-	-	-	1,005	-	-	(251)	-
21	Annualize O&M non-labor expenses	-	-	-	508	-	-	(127)	-

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
DETAIL OF ACCOUNTING ADJUSTMENTS-SOUTH CAROLINA RETAIL
FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
(Thousands of Dollars)

Line No.	Description	Electric Operating Revenue (Col. 1)	Fuel Used in Electric Generation (Col. 2)	Purchased Power (Col. 3)	Other O&M Expense (Col. 4)	Depreciation and Amortization (Col. 5)	General Taxes (Col. 6)	Income Taxes 24.95% (Col. 7)	Amortization of ITC (Col. 8)
22	Normalize O&M labor expenses	-	-	-	3,059	-	180	(808)	-
23	Update benefits costs	-	-	-	3,366	-	-	(840)	-
24	Levelize nuclear refueling outage costs	-	-	-	4,256	-	-	(1,062)	-
25	Amortize rate case costs	-	-	-	770	-	-	(192)	-
26	Adjust aviation expenses	-	-	-	(249)	-	(2)	63	-
27	OPEN	-	-	-	-	-	-	-	-
28	Adjust for credit card fees	-	-	-	773	-	-	(193)	-
29	Adjust O&M for executive compensation	-	-	-	(304)	-	-	76	-
30	Adjust for Customer Connect additional expense and deferral	-	-	-	1,227	515	-	(435)	-
31	Adjust vegetation management expenses	-	-	-	307	-	-	(77)	-
32	Synchronize interest expense with end of period rate base	-	-	-	-	-	-	(51)	-
33	Adjust 1/8 O&M for accounting and pro-forma adjustments	-	-	-	-	-	-	-	-
34	Adjust for Federal tax rate change	-	-	-	-	-	-	(13,871)	-
35	Adjust deferred cost balance related to SC Grid	-	-	-	-	1,164	-	(291)	-
36	OPEN								
37	OPEN								
38	OPEN								
39	OPEN								
40	OPEN								
41	Total adjustments	<u>\$ (1,452)</u>	<u>\$ 15,903</u>	<u>\$ -</u>	<u>\$ (1,643)</u>	<u>\$ 59,352</u>	<u>\$ 1,025</u>	<u>\$ (32,906)</u>	<u>\$ -</u>

Notes: (a) Adjustments to rate base shown on pages 4-4d.

Bateman
Exhibit 1
Page 3 (cont.)

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
ORIGINAL COST RATE BASE-ELECTRIC OPERATIONS
FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
(Thousands of Dollars)

Line No.	Description	Page Reference	Total Company Per Books (Col. 1)	South Carolina Retail		
				Per Books (Col. 2)	Accounting Adjustments (Col. 3)	As Adjusted (Col. 4)
1	Electric plant in service	4a	\$ 26,183,538	\$ 2,691,450	\$ 117,262	\$ 2,808,712
2	Less: Accumulated depreciation and amortization	4b	(11,299,853)	(1,177,920)	(3,048)	(1,180,968)
3	Net electric plant		14,883,685	1,513,530	114,214	1,627,744
4	Add: Materials and supplies	4c	1,126,375	104,777	(2,251)	102,526
5	Working capital	4d	(418,232)	(11,373)	42	(11,330)
6	Plant held for future use		46,711	4,802		4,802
7	Less: Accumulated deferred taxes		(1,909,741)	(212,652)	21,202 (a)	(191,451)
8	Operating reserves		(103,988)	(10,627)	-	(10,627)
9	Construction work in progress		-	-	-	- (b)
10	Total		\$ 13,624,810	\$ 1,388,456	\$ 133,207	\$ 1,521,662

Notes: (a) Reflects adjustments of \$1,631 for removal of ADIT associated with removal of the SC DERP asset, \$10,062 associated with removal of DSM/EE and DSDR from rate base, (\$1,345) additional ADIT associated with new depreciation rates, \$733 related to end of life nuclear reserves, \$3,931 related to previously deferred amounts, (\$10,060) associated with deferred environmental costs, (\$233) related to amortization of deferred AMI costs, (\$769) related to amortization of rate case costs, (\$257) related to amortization of deferred customer connect costs, \$17,800 related to the change in federal tax rate, and (\$291) related to the amortization of deferred grid costs.
(b) CWIP has been removed from rate base

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
ELECTRIC PLANT IN SERVICE AT ORIGINAL COST
FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
(Thousands of Dollars)

Line No.	Description	Total Company Per Books (Col. 1)	Per Books (Col. 2)	South Carolina Retail	
				Accounting Adjustments (Col. 3)	As Adjusted (Col. 4)
				(b)	
1	Production Plant	\$ 15,837,016	\$ 1,515,298	\$ 107,352	\$ 1,622,650
2	Transmission Plant	2,601,062	242,011	20,800	262,812
3	Distribution Plant	6,236,202	774,976	21,626	796,602
4	General Plant	654,815	71,373	(30,783)	40,590
5	Intangible Plant	498,613	51,254	(1,734)	49,520
6	Subtotal	25,827,707 (a)	2,654,913	117,262	2,772,174
7	Nuclear Fuel (Net)	355,830	36,537	-	36,537
8	Total electric plant in service	\$ 26,183,538	\$ 2,691,450	\$ 117,262	\$ 2,808,712

Notes: (a) Excludes asset retirement obligations and certain capitalized leases

(b) Reflects reduction of (\$25,846) for DSDR plant recovered through a rider, \$176,506 for post test year plant additions, and (\$33,399) for removal of the NCEMPA plant acquisition adjustment.

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
 ACCUMULATED DEPRECIATION AND AMORTIZATION - ELECTRIC PLANT IN SERVICE
 FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
 (Thousands of Dollars)

No.	Description	Total Company Per Books (Col. 1)	Per Books (Col. 2)	South Carolina Retail	
				Accounting Adjustments (Col. 3)	As Adjusted (Col. 4)
1	Production Reserve	\$ (6,964,031)	\$ (673,642)	\$ (15,724)	\$ (689,366)
2	Transmission Reserve	(798,253)	(74,529)	(925)	(75,454)
3	Distribution Reserve	(3,005,978)	(373,555)	11,239	(362,315)
4	General Reserve	(249,802)	(27,228)	(931)	(28,159)
5	Intangible Reserve	<u>(281,789)</u>	<u>(28,966)</u>	<u>3,292</u>	<u>(25,674)</u>
6	Total	<u>\$ (11,299,853)</u>	<u>(a) \$ (1,177,920)</u>	<u>\$ (3,048)</u>	<u>\$ (1,180,968)</u>
7	The annual composite rates (calculated based on 2017 balances) for computing depreciation are shown below:				
		<u>Plant/Other</u>			
8	Steam production plant	3.80%			
9	Nuclear production plant	2.77%			
10	Hydro production plant	3.53%			
11	Combustion turbine production plant	3.38%			
12	Transmission plant	1.90%			
13	Distribution plant	2.44%			
14	General plant	4.25%			
15	Intangible plant	20.00%			

Notes: (a) Excludes asset retirement obligations

(b) Reflects \$8,827 for DSDR accumulated depreciation recovered through a rider, (\$2,801) for the impact of annualized depreciation, (\$6,691) related to new depreciation rates, (\$5,327) associated with post test year plant additions, and \$2,944 related to the removal of the NCEMPA plant acquisition adjustment.

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
MATERIALS AND SUPPLIES
FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
(Thousands of Dollars)

Line No.	Description	Total Company Per Books (Col. 1)	Per Books (Col. 2)	South Carolina Retail	
				Accounting Adjustments (Col. 3)	As Adjusted (Col. 4)
	Fuel Stock:				
1	Coal	\$ 242,761	\$ 24,927	\$ (2,251) (a)	\$ 22,676
2	Oil	-	-		-
3	Total fuel stock	242,761	24,927	(2,251)	22,676
4	Other electric materials and supplies and stores clearing	883,614	79,850	-	79,850
5	Total Materials and Supplies	<u>\$ 1,126,375</u>	<u>\$ 104,777</u>	<u>\$ (2,251)</u>	<u>\$ 102,526</u>

Notes: (a) Adjusts coal inventory to reflect the targeted inventory level of 40 days at full load.

DUKE ENERGY PROGRESS, LLC Docket No. 2018-318-E
 WORKING CAPITAL INVESTMENT
 FOR THE TEST PERIOD ENDED DECEMBER 31, 2017
 (Thousands of Dollars)

Line No.	Description	Total Company	South Carolina Retail		
		Per Books	Per Books	Accounting Adjustments	As Adjusted
		(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)
1	12 Months O&M (excluding purchased power & nuclear fuel)	\$ 2,385,539	\$ 242,529	\$ 14,260 (a)	\$ 256,789
2	1/8 of O&M on Line 1	\$ 298,192	\$ 30,316	1,782 (b)	32,098
3	Less: average taxes accrued	(3,472)	(353)	-	(353)
4	Subtotal: Investor funds for operations	294,720	29,963	1,782	31,745
5	Required bank balance			-	-
6	Unamortized Debt	47,999	4,880	-	4,880
7	Prepayments	72,816	7,403	-	7,403
8	Customer Deposits	(129,255)	(19,816)	-	(19,816)
9	Other	(704,512)	(33,802)	(1,740) (c)	(35,542)
10	Subtotal: Other investor funds	(712,952)	(41,336)	(1,740)	(43,075)
11	Total working capital investment	\$ (418,232)	\$ (11,373)	\$ 42	\$ (11,330)

Notes: (a) Page 3, Line 41, Columns 2, 3, and 4

(b) Reflects an increase in operating funds based on 1/8 of O&M on line 1

(c) Reflects a decrease of (\$7,041) for fuel related updates, (\$27,929) to remove costs recovered through the DSM/EE rider, \$5,390 related to new depreciation rates, (\$2,938) related to end of life nuclear reserves, (\$14,713) to remove 2014 storms from rate base and (\$1,041) related to removal of other previously deferred amounts, \$40,322 for the addition of deferred coal ash costs to rate base, \$935 for addition of the deferred AMI balance to rate base, \$3,082 for addition of deferred rate case costs to rate base, \$1,029 for addition of deferred customer connect costs to rate base, and \$1,164 for addition of deferred grid costs to rate base.

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
ORS DR 1-5, BATEMAN EXHIBIT 2
COST OF SERVICE STUDY
FOR THE TEST PERIOD ENDED December 31, 2017
(DOLLARS IN THOUSANDS)
SOUTH CAROLINA

Line No.	Rate Class	Annualized Rate Base (A)	Present Rate Revenues Excl DSM/EE (B)	Present Net Operating Income (C)	Present ROR (D)	Gross Revenues At Average ROR (E)	Variance From The Average (F)	25.0%	Proposed Rate Increase Before Reduction in Variance (H)	Proposed Rate Increase After Reduction in Variance (I)	Present Rate Revenues Incl. DSM/EE and DERP (J)	Proposed Percent Increase (K)	RoR at Proposed Rates (L)	EDIT Rider (M)	Proposed Rate Increase <u>incl.</u> Riders After Reduction in Variance (N)		Proposed Percent Increase <u>incl.</u> riders (O)
								Reduction in Variance From The Average (G)									
					(C) / (A)		(B) - (E)	(F) * 25%		(G) + (H)		(I) / (J)			(I) + (M) + (N)		(I) + (M) + (N)
1	RES	\$ 700,799	\$ 216,398	\$ 18,983	2.71%	\$ 229,407	\$ (13,009)	\$ 3,252	\$ 31,625	\$ 34,877	\$ 242,291	14.39%	6.43%	\$ (4,585)	\$ 30,292		12.50%
2	SGS	\$ 111,703	\$ 31,460	\$ 2,894	2.59%	\$ 33,709	\$ (2,249)	\$ 562	\$ 5,041	\$ 5,603	\$ 33,491	16.73%	6.34%	\$ (739)	\$ 4,864		14.52%
3	SGSCLR	\$ 1,440	\$ 373	\$ 7	0.48%	\$ 442	\$ (70)	\$ 17	\$ 65	\$ 82	\$ 405	20.36%	4.75%	\$ (9)	\$ 73		18.03%
4	MGS	\$ 340,793	\$ 137,393	\$ 23,708	6.96%	\$ 124,431	\$ 12,963	\$ (3,241)	\$ 15,379	\$ 12,138	\$ 145,605	8.34%	9.62%	\$ (2,338)	\$ 9,800		6.73%
5	LGS	\$ 297,726	\$ 127,951	\$ 9,561	3.21%	\$ 131,484	\$ (3,533)	\$ 883	\$ 13,435	\$ 14,319	\$ 128,375	11.15%	6.81%	\$ (1,984)	\$ 12,335		9.61%
6	SI	\$ 5,538	\$ 2,009	\$ 500	9.02%	\$ 1,646	\$ 363	\$ (91)	\$ 250	\$ 159	\$ 2,137	7.45%	11.17%	\$ (34)	\$ 125		5.86%
7	TSS	\$ 290	\$ 70	\$ (15)	-5.03%	\$ 105	\$ (35)	\$ 9	\$ 13	\$ 22	\$ 76	28.73%	0.62%	\$ (2)	\$ 20		26.31%
8	ALS, SLS	\$ 63,296	\$ 18,222	\$ 6,762	10.68%	\$ 12,672	\$ 5,550	\$ (1,388)	\$ 2,856	\$ 1,469	\$ 18,222	8.06%	12.42%	\$ (317)	\$ 1,152		6.32%
9	SFL	\$ 76	\$ 39	\$ 18	24.12%	\$ 19	\$ 20	\$ (5)	\$ 3	\$ (2)	\$ 39	-4.21%	22.51%	\$ (0)	\$ (2)		-5.23%
TOTAL RETAIL		\$ 1,521,662	\$ 533,914	\$ 62,418	4.10%	\$ 533,914	\$ (0)	\$ 0	\$ 68,668	\$ 68,668	\$ 570,642	12.03%	7.47%	\$ (10,008)	\$ 58,660		10.28%

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
BATEMAN EXHIBIT 3
FOR THE TEST PERIOD ENDED December 31, 2017
SOUTH CAROLINA RETAIL
Excess Deferred Income Tax Rider Calculation
(Dollars in thousands)

	Federal EDIT - Protected SC Retail	Federal EDIT - Unprotected, PP&E related SC Retail	Federal EDIT - Unprotected, non PP&E related SC Retail	Deferred Revenue, DERP Solar Rebate SC Retail	NC EDIT SC Retail	Total SC Retail
	(A)	(B)	(C)	(D)	(E)	(F)
1 Regulatory liability including gross up as of 12/31/2017	[1] \$(164,980)	\$ (47,756)	\$ 5,043	\$ -	\$ (15,176)	(222,870)
2 Estimated transition of Protected to Unprotected regulatory liability during 2018	[1] \$ 7,078		\$ (7,078)			-
3 Projected deferred revenue for federal tax rate change as of 12/31/2018	[1]			\$ (15,880)		(15,880)
4 DERP deferral balance for solar rebate as of 9/30/2018	[2]			\$ 12,668		12,668
5 Other projected changes in regulatory tax liability	[3]				\$ 14,261	14,261
6 Regulatory liability for federal tax change including gross up for Year 1 rider calculation (Sum of L1 to L5)	\$(157,903)	\$ (47,756)	\$ (2,035)	\$ (3,212)	\$ (916)	(211,821)
7 Annual amortization percentage	4.29%	5.00%	20.00%	20.00%	100.00%	4.99%
8 Annual amortization amount (L6 x L7)	(6,774)	(2,388)	(407)	(642)	(916)	(11,127)
9 Years of rider amortization	23.31	20	5	5	1	

[1] Excess deferred tax liability (EDIT) as of 12/31/2017 by jurisdiction, and forecast 2018 transition between categories based on Tax analysis of ADIT.

NC EDIT liability in the 0254037 and 0253600 accounts as of 12/31/2017 forecast as of June 2019.

DERP Solar Rebates are deferred to the 0182494 account

[2] Bateman Exhibit 3, Page 3, Line 3. Deferred revenues in the 0229010 account forecast as of 12/31/2018.

[3] Bateman Exhibit 3, Page 4, Line 11

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
BATEMAN EXHIBIT 3
FOR THE TEST PERIOD ENDED December 31, 2017
SOUTH CAROLINA RETAIL
Excess Deferred Income Tax Rider Calculation
(Dollars in thousands)

	Ratio	Rate	After Tax Weighted Average Cost of Capital (WACC)
<u>Cost of Capital per Bateman Exhibit 1</u>			
Debt	47.00%	4.06%	1.43%
Equity	53.00%	10.50%	5.57%
			7.00%
Statutory Tax Rate			24.95%
Retention factor for SC license tax, PSC Utility Assessment Fee			99.56%

Annual Rider Calculation

Amortization - From Page 1, L9															
Year	Beginning Balance, Page 1, L7	Federal EDIT - Protected	Federal EDIT - Unprotected , PP&E related	Federal EDIT - Unprotected, non PP&E related	Deferred Revenue, DERP Solar Rebate	NC EDIT	Total Amortization (G) =(B)+(C)+(D) +[E]+[F]	Ending Balance before Return (H) = (A) - (G)	Average of Beginning and Ending Balance (I) = ((A) + (H)) /2	EDIT Balance in Base Rates, Page 1, L1 (J)	Change in Regulatory Liability for Rider Return (K) = (I) - (J)	Return for Rider (L) = (K) x After Tax WACC	Rider Revenues (M) = (G) + (L)	Rider Revenues incl. SC license Tax, PSC Utility Assessment Fee (N) = (M) / Retention Factor	
	(A)	(B)	(C)	(D)	(E)	(F)									
Jun 19- May 20	1	(211,821)	(6,774)	(2,388)	(407)	(642)	(916)	(11,127)	(200,695)	(\$206,258)	(222,870)	\$16,612	\$1,163	(9,964)	(10,008)
Jun 20- May 21	2	(200,695)	(6,774)	(2,388)	(407)	(642)		(10,211)	(190,483)	(\$195,589)	(222,870)	\$27,281	\$1,910	(8,302)	(8,339) [1]
Jun 21- May 22	3	(190,483)	(6,774)	(2,388)	(407)	(642)		(10,211)	(180,272)	(\$185,378)	(222,870)	\$37,492	\$2,624	(7,587)	(7,621) [1]
Jun 22- May 23	4	(180,272)	(6,774)	(2,388)	(407)	(642)		(10,211)	(170,061)	(\$175,166)	(222,870)	\$47,703	\$3,339	(6,872)	(6,903) [1]
Jun 23- May 24	5	(170,061)	(6,774)	(2,388)	(407)	(642)		(10,211)	(159,849)	(\$164,955)	(222,870)	\$57,915	\$4,054	(6,157)	(6,185) [1]

[1] The rider amounts for years 2 through 5 are shown for illustrative purposes only. Actual rider amounts will be filed each year with updates discussed in my testimony by March 31 for Commission approval.

**DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
BATEMAN EXHIBIT 3
FOR THE TEST PERIOD ENDED December 31, 2017
SOUTH CAROLINA RETAIL
Excess Deferred Income Tax Rider Calculation**

(Dollars)

	<u>Projected Deferred Revenue for Federal Tax Rate Change in account 0229010</u>	<u>SC Retail</u>
1	Deferrals booked as of 9/30/2018	\$ (11,264,278)
2	Forecast deferrals for October - December 2018	\$ (4,615,861)
3	Projected deferred revenue for federal tax rate change as of 12/31/2018 (L1 + L2)	<u>\$ (15,880,139)</u>

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
BATEMAN EXHIBIT 3
FOR THE TEST PERIOD ENDED December 31, 2017
SOUTH CAROLINA RETAIL
Excess Deferred Income Tax Rider Calculation

(Dollars in thousands)

<u>Projected NC rate change tax liability (NC EDIT)</u>		Total SC Retail	
1	Annual amortization approved in docket 2016-227-E	\$ (12,369)	[1]
2	Tax rate in docket 2016-227-E	38.25%	
3	Current tax rate	24.95%	
4	Annual amortization approved in Docket 2016-227-E adjusted for change in federal tax rate (L1 x (1- L2) / (1- L3))	\$ (10,177)	
5	Projected additional months of amortization approved in Docket 2018-205-E (Jan 1, 2019 - May 31, 2019) assuming new rates effective June 1, 2019	5	
6	Projected amortization (Jan 1, 2019- May 31, 2019) (L4/12 x L5)	\$ (4,240)	
7	Projected NC deferred tax liability as of 12/31/2018, includes amounts not included in last rate case	\$ (5,156)	[2]
8	Projected amortization from Jan 1, 2019- May 31, 2019 (L5)	\$ (4,240)	
9	Projected NC deferred tax liability as of 6/1/2019 (L7 - L8)	\$ (916)	
10	Regulatory liability as of end of the test period, 12/31/2017	\$ (15,176)	
11	Projected change in regulatory tax liability (L9 - L10)	\$ 14,261	

[1] Settlement Agreement, Attachment A, Page 4, Line 27 in Docket 2016-227-E.

[2] Per Tax Department as of March 2018

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN
1 SUMMER CP DEMAND ALLOCATION

Bateman Exhibit 4
Page 1

Line No.	Description	TOTAL SYSTEM	SC RETAIL	SC RES	SC SGS	SC SGSCLR	SC MGS	SC LGS	SC SI	SC TSS
1	DISTRIBUTION PLANT IN SERVICE, Excluding 371, 373, and Extra Facilities	5,494,678,273	661,411,897	474,863,326	73,585,834	1,654,251	72,709,474	29,531,695	5,303,935	360,972
2	Distribution Customer Class Allocations for Projections		100.00%	71.80%	11.13%	0.25%	10.99%	4.46%	0.80%	0.05%
3										
4	Transmission Peak	12,734,339	1,185,427	487,425	79,952	610	323,515	291,026	2,789	110
5	Transmission Peak Percentage		100.00%	41.12%	6.74%	0.05%	27.29%	24.55%	0.24%	0.01%
6										
7										
8	Distribution & Transmission General Plant	351,396,160	40,438,477	22,811,687	3,570,604	70,695	5,506,148	3,687,110	233,829	15,241
9	Distribution & Transmission General Plant Allocation		100.00%	56.41%	8.83%	0.17%	13.62%	9.12%	0.58%	0.04%
10										
11	Phase 1 Rate Step up									
12	Distribution Revenue Requirement		\$ 2,750,885	\$ 1,975,009	\$ 306,052	\$ 6,880	\$ 302,407	\$ 122,826	\$ 22,060	\$ 1,501
13	Transmission Revenue Requirement		862,660	354,710	58,183	444	235,428	211,785	2,030	80
14	General Intangible Plant (Communications / Enterprise Systems)		1,521,406	858,238	134,336	2,660	207,156	138,719	8,797	573
15	Total (Sum L12 through L14)		<u>\$ 5,134,951</u>	<u>\$ 3,187,957</u>	<u>\$ 498,570</u>	<u>\$ 9,984</u>	<u>\$ 744,991</u>	<u>\$ 473,330</u>	<u>\$ 32,887</u>	<u>\$ 2,155</u>
16	Check Total		\$0							
17	Customer % for Distribution Investments based on Current Investments		57.44%	64.09%	74.67%	95.51%	23.05%	2.77%	12.33%	96.34%
18										
19	Customer Related Portion (L12 * L17)		\$ 1,580,061	\$ 1,265,847	\$ 228,517	\$ 6,571	\$ 69,720	\$ 3,403	\$ 2,719	\$ 1,446
20	Non-Customer Related Portion (L15 - L19)		3,554,890	1,922,110	270,053	3,413	675,272	469,927	30,168	709
21	Total Revenue Requirement (Sum L19 through L20)		<u>\$ 5,134,951</u>	<u>\$ 3,187,957</u>	<u>\$ 498,570</u>	<u>\$ 9,984</u>	<u>\$ 744,991</u>	<u>\$ 473,330</u>	<u>\$ 32,887</u>	<u>\$ 2,155</u>

Phase 2 Rate Step up

22	Distribution Revenue Requirement		\$ 3,208,510	\$ 2,303,563	\$ 356,965	\$ 8,025	\$ 352,714	\$ 143,258	\$ 25,729	\$ 1,751
23	Transmission Revenue Requirement		722,123	296,924	48,704	371	197,074	177,283	1,699	67
24	General Intangible Plant (Communications / Enterprise Systems)		1,858,104	1,048,172	164,065	3,248	253,001	169,419	10,744	700
25	Total (Sum L22 through L24)		<u>\$ 5,788,737</u>	<u>\$ 3,648,658</u>	<u>\$ 569,735</u>	<u>\$ 11,645</u>	<u>\$ 802,790</u>	<u>\$ 489,960</u>	<u>\$ 38,173</u>	<u>\$ 2,519</u>
26	Check Total		\$0							
27	Customer % for Distribution Investments based on Current Investments		57.44%	64.09%	74.67%	95.51%	23.05%	2.77%	12.33%	96.34%
28										
29	Customer Related Portion (L22 * L27)		\$ 1,842,913	\$ 1,476,428	\$ 266,532	\$ 7,664	\$ 81,318	\$ 3,969	\$ 3,171	\$ 1,687
30	Non-Customer Related Portion (L25 - L29)		3,945,824	2,172,231	303,202	3,980	721,472	485,991	35,001	832
31	Total Revenue Requirement (Sum L28 through L30)		<u>\$ 5,788,737</u>	<u>\$ 3,648,658</u>	<u>\$ 569,735</u>	<u>\$ 11,645</u>	<u>\$ 802,790</u>	<u>\$ 489,960</u>	<u>\$ 38,173</u>	<u>\$ 2,519</u>

Lines 1 - 9 from Cost of Service Study.

Lines 12-14 from Bateman Exhibit 4 Page 2, lines 71-73.

Lines 22 - 24 from Bateman Exhibit 4 Page 4, lines 83-85.

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN
1 SUMMER CP DEMAND ALLOCATION

Bateman Exhibit 4
Page 1 Cont.

Line No.	Description	SC ALS	SC SLS	SC SFL
1	DISTRIBUTION PLANT IN SERVICE, Excluding 371, 373, and Extra Facilities	2,266,723	998,557	137,130
2	Distribution Customer Class Allocations for Projections	0.34%	0.15%	0.02%
3				
4	Transmission Peak	0	0	0
5	Transmission Peak Percentage	0.00%	0.00%	0.00%
6				
7				
8	Distribution & Transmission General Plant	2,700,029	1,837,683	5,453
9	Distribution & Transmission General Plant Allocation	6.68%	4.54%	0.01%
10				
11	Phase 1 Rate Step up			
12	Distribution Revenue Requirement	\$ 9,428	\$ 4,153	\$ 570
13	Transmission Revenue Requirement	-	-	-
14	General Intangible Plant (Communications / Enterprise Systems)	101,582	69,139	205
15	Total (Sum L12 through L14)	<u>\$ 111,010</u>	<u>\$ 73,292</u>	<u>\$ 775</u>
16				
17	Customer % for Distribution Investments based on Current Investments	0.00%	41.08%	23.07%
18				
19	Customer Related Portion (L12 * L17)	\$ -	\$ 1,706	\$ 132
20	Non-Customer Related Portion (L15 - L19)	111,010	71,586	644
21	Total Revenue Requirement (Sum L19 through L20)	<u>\$ 111,010</u>	<u>\$ 73,292</u>	<u>\$ 775</u>

Phase 2 Rate Step up

22	Distribution Revenue Requirement	\$ 10,996	\$ 4,844	\$ 665
23	Transmission Revenue Requirement	-	-	-
24	General Intangible Plant (Communications / Enterprise Systems)	124,063	84,440	251
25	Total (Sum L22 through L24)	<u>\$ 135,059</u>	<u>\$ 89,284</u>	<u>\$ 916</u>
26				
27	Customer % for Distribution Investments based on Current Investments	0.00%	41.08%	23.07%
28				
29	Customer Related Portion (L22 * L27)	\$ -	\$ 1,990	\$ 153
30	Non-Customer Related Portion (L25 - L29)	135,059	87,294	762
31	Total Revenue Requirement (Sum L28 through L30)	<u>\$ 135,059</u>	<u>\$ 89,284</u>	<u>\$ 916</u>

Lines 1 - 9 from Cost of Service Study.

Lines 12-14 from Bateman Exhibit 4 Page 2, lines 71-73.

Lines 22 - 24 from Bateman Exhibit 4 Page 4, lines 83-85.

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 1

REVENUE REQUIREMENT

For the period January 1, 2019 through December 31, 2019

Bateman Exhibit 4

Page 2

Line No.	Description	Total SC Retail	Depreciation Rate	Depreciation
1	<u>Impact to Rate Base Line Items</u>			
2	<u>Additions to gross electric plant:</u>			
3	Distribution [1]	\$ 13,669,981	2.43%	\$ 332,181
4	Transmission [1]	4,865,943	1.91%	92,940
5	General - Advanced DMS [1]	879,434	10.00%	87,943
6	General - Communication [1]	2,436,016	5.00%	121,801
7	General - Enterprise Applications [1]	1,186,120	20.00%	237,224
8	Impact to electric plant in service (Sum L3 through L7)	<u>\$ 23,037,494</u>		<u>\$ 872,088</u>
9				
10	<u>Accumulated depreciation & amortization:</u>			
11	Distribution accumulated depreciation (-L3)	\$ (332,181)		
12	Transmission accumulated depreciation (-L4)	(92,940)		
13	General Plant accumulated depreciation (-Sum L5 through L7)	<u>(446,968)</u>		
14	Impact to accumulated depreciation (Sum L11 through L13)	<u>\$ (872,088)</u>		
15				
16	<u>Net electric plant:</u>			
17	Distribution (L3 + L11)	\$ 13,337,801		
18	Transmission (L4 + L12)	4,773,003		
19	General Plant (L5 + L6 + L7 + L13)	4,054,601		
20	Impact to net plant (Sum L17 through L19)	<u>\$ 22,165,405</u>		
21				
22	Cost of Capital [2]	9.36%		
23				
24	<u>Rate Base Revenue Requirement</u>			
25	Distribution (L17 * L22)	\$ 1,249,051		
26	Transmission (L18 * L22)	446,980		
27	General Plant (L19 * L22)	379,703		
28	Impact to net plant (Sum L25 through L27)	<u>\$ 2,075,733</u>		
29				
30	<u>Impact to Income Statement Line Items</u>			
31	<u>Depreciation and amortization:</u>			
32	Distribution depreciation expense (L3)	\$ 332,181		
33	Transmission depreciation expense (L4)	92,940		
34	General Plant depreciation expense (Sum L5 through L7)	446,968		
35	Impact to deprec. and amortization (Sum L32 through L34)	<u>\$ 872,088</u>		
36				

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 1
REVENUE REQUIREMENT
For the period January 1, 2019 through December 31, 2019

Bateman Exhibit 4
Page 2 Cont.

Line No.	Description	Total SC Retail
37	<u>Amortization of 2019 deferral:</u>	
38	Distribution depreciation expense [3]	\$ 977,573
39	Transmission depreciation expense [3]	302,335
40	General Plant depreciation expense [3]	672,503
41	Impact to deprec. and amortization (Sum L38 through L40)	<u>\$ 1,952,411</u>
42		
43	<u>General taxes:</u>	
44	Property tax rate - South Carolina	1.3565%
45	Property tax rate - Combined North Carolina and South Carolina	0.3815%
46		
47	Distribution property tax expense (L3 * L44)	\$ 185,427
48	Transmission property tax expense (L4 * L45)	18,564
49	General Plant property tax expense (Sum(L5 through L7) * L45)	17,174
50	Impact to general taxes (Sum L47 through L49)	<u>\$ 221,166</u>
51		
52	<u>Income Taxes</u>	24.95%
53	Distribution (L32 + L38 + L47) * -L52	\$ (373,048)
54	Transmission (L33 + L39 + L48) * -L52	(103,253)
55	General Plant (L34 + L40 + L49) * -L52	(283,593)
56	Total income taxes (Sum L53 through L55)	<u>\$ (759,894)</u>
57		
58	<u>Total Income statement impact</u>	
59	Distribution (L32 + L38 + L47 + L53)	\$ 1,122,133
60	Transmission (L33 + L39 + L48 + L54)	310,586
61	General Plant (L34 + L40 + L49 + L55)	853,052
62	Total income statement impact (Sum L59 through L61)	<u>\$ 2,285,772</u>
63		
64	<u>Income Statement Requirement</u>	74.72% [4]
65	Distribution (L59 / L64)	\$ 1,501,834
66	Transmission (L60 / L64)	415,681
67	General Plant (L61 / L64)	1,141,703
68	Total income statement Requirement (Sum L65 through L67)	<u>\$ 3,059,218</u>

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 1
REVENUE REQUIREMENT
For the period January 1, 2019 through December 31, 2019

Bateman Exhibit 4
Page 2 Cont.

Line <u>No.</u>	<u>Description</u>	Total <u>SC Retail</u>
69		
70	<u>Total Revenue Requirement for Plant additions and Deferral</u>	
71	Distribution (L25 + L65)	\$ 2,750,885
72	Transmission (L26 + L66)	862,660
73	General Plant (L27 + L67)	1,521,406
74	Total Revenue Requirement (Sum L71 through L73)	<u>\$ 5,134,951</u>

[1] Bateman Exhibit 4 page 3, lines 7-11 May, 2020.
[2] Bateman Exhibit 4 page 7, line 5.
[3] Bateman Exhibit 4 page 3, lines 114-116
[4] Bateman Exhibit 4 page 7, line 24.

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 1
For the period January 1, 2019 through December 31, 2019

Bateman Exhibit 4
Calculation of SC Retail Costs
Page 3

Calculation of South Carolina Retail Costs		2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	
Line		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No.	Description												
96	Return on Deferred Balance												
97	After Tax Long-term debt [4]	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%	1.432%
98	After Tax Members' equity [4]	5.565%	5.565%	5.565%	5.565%	5.565%	5.565%	5.565%	5.565%	5.565%	5.565%	5.565%	5.565%
99	Distribution Debt Return on Deferral (L92 * L97/12)	20	68	130	205	294	396	512	641	785	942	1,113	1,298
100	Transmission Debt Return on Deferral (L93 * L97/12)	2	8	19	34	58	93	137	186	236	288	342	398
101	General Plant Debt Return on Deferral (L94 * L97/12)	37	114	194	277	364	454	547	644	744	847	954	1,069
102	Distribution Equity Return on Deferral (L92 * L98/12)	79	264	504	796	1,141	1,538	1,989	2,493	3,050	3,661	4,326	5,045
103	Transmission Equity Return on Deferral (L93 * L98/12)	7	30	72	134	227	362	533	721	916	1,119	1,328	1,545
104	General Plant Equity Return on Deferral (L94 * L98/12)	145	443	753	1,077	1,414	1,764	2,126	2,502	2,891	3,292	3,707	4,154
105	Total (Sum L99:L104)	290	927	1,671	2,523	3,497	4,607	5,844	7,187	8,621	10,149	11,770	13,508
106													
107	Total Deferred balance												
108	Distribution deferral (L83 + L99 + L102)	34,005	46,205	57,504	68,850	80,245	91,688	103,181	114,723	126,314	137,955	149,646	161,388
109	Transmission deferral (L84 + L100 + L103)	2,836	7,191	11,067	15,640	24,720	33,875	39,884	41,435	42,993	44,558	46,130	47,710
110	General Plant deferral (L85 + L101 + L104)	62,877	65,893	68,288	71,527	74,293	77,068	79,853	82,648	85,453	88,267	91,092	101,974
111	Total Sum (L108:L110)	99,717	119,289	136,859	156,017	179,258	202,632	222,918	238,805	254,759	270,780	286,869	311,072
112													
113	Annual Amortization												
114	Distribution amortization amount (L108/2)												
115	Transmission amortization amount (L109/2)												
116	General Plant amortization amount (L110/2)												
117	Total Annual amortization amount (L111/2)												

- [1] Based on lag time assumptions noted on Page 6
- distribution plant, January based on 2018 capital spend. February - December based on monthly amount from Page 6 [A]
- transmission plant, January - June based on 2018 capital spend. July - December based on monthly amount from Page 6 [B]
- communication plant, January - March based on 2018 capital spend. April - December based on monthly amount from Page 6 [C]
- Advance DMS and Enterprise Systems annual amounts amount from Page 6 [D] placed in service in December.
- [2] Per accounting.
- [3] From Bateman Exhibit 4 page 6.
- [4] From Bateman exhibit 4 page 7, lines 3 and 4.

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 1

For the period January 1, 2019 through December 31, 2019

Bateman Exhibit 4
Calculation of SC Retail Costs
Page 3

Calculation of South Carolina Retail Costs		2020	2020	2020	2020	2020	
Line		Jan	Feb	Mar	Apr	May	Total
No.	Description						
1	<u>Plant-in-Service: [1]</u>						
2	Distribution to Plant in Service						
3	Transmission to Plant in Service						
4	Advanced DMS Plant in Service						
5	Communications Plant in Service						
6	Enterprise Applications Plant in Service						
7	Cumulative Distribution investment (L2)	13,669,981	13,669,981	13,669,981	13,669,981	13,669,981	
8	Cumulative Transmission investment (L3)	4,865,943	4,865,943	4,865,943	4,865,943	4,865,943	
9	Cumulative Advanced DMS investment (L4)	879,434	879,434	879,434	879,434	879,434	
10	Cumulative Communication investment (L5)	2,436,016	2,436,016	2,436,016	2,436,016	2,436,016	
11	Cumulative Enterprise Application investment (L6)	1,186,120	1,186,120	1,186,120	1,186,120	1,186,120	
12							
13	<u>Accumulated depreciation & amortization:</u>						
14	Distribution plant depreciation rate [2]	2.43%	2.43%	2.43%	2.43%	2.43%	
15	Transmission plant depreciation rate [2]	1.91%	1.91%	1.91%	1.91%	1.91%	
16	Advance DMS plant depreciation rate [2]	10.00%	10.00%	10.00%	10.00%	10.00%	
17	Communication plant depreciation rate [2]	5.00%	5.00%	5.00%	5.00%	5.00%	
18	Enterprise Application plant depreciation rate [2]	20.00%	20.00%	20.00%	20.00%	20.00%	
19	Distribution depreciation expense (L7 * L14)	27,682	27,682	27,682	27,682	27,682	
20	Transmission depreciation expense (L8 * L15)	7,745	7,745	7,745	7,745	7,745	
21	Advanced DMS depreciation expense (L9 * L16)	7,329	7,329	7,329	7,329	7,329	
22	Communication depreciation expense (L10 * L17)	10,150	10,150	10,150	10,150	10,150	
23	Enterprise Application depreciation expense (L11 * L18)	19,769	19,769	19,769	19,769	19,769	
24	Distribution accumulated depreciation	(181,725)	(209,406)	(237,088)	(264,770)	(292,452)	
25	Transmission accumulated depreciation	(61,332)	(69,077)	(76,822)	(84,567)	(92,312)	
26	Advanced DMS accumulated depreciation	(7,329)	(14,657)	(21,986)	(29,314)	(36,643)	
27	Communication accumulated depreciation	(67,091)	(77,241)	(87,391)	(97,541)	(107,691)	
28	Enterprise Application accumulated depreciation	(19,769)	(39,537)	(59,306)	(79,075)	(98,843)	
29							
30	<u>Net electric plant</u>						
31	Distribution (L7 + L24)	13,488,257	13,460,575	13,432,893	13,405,212	13,377,530	
32	Transmission (L8 + L25)	4,804,610	4,796,866	4,789,121	4,781,376	4,773,631	
33	Advanced DMS (L9 + L26)	872,105	864,776	857,448	850,119	842,791	
34	Communication (L10 + L27)	2,368,925	2,358,775	2,348,625	2,338,475	2,328,325	
35	Enterprise Application (L11 + L28)	1,166,351	1,146,583	1,126,814	1,107,045	1,087,277	
36	Average rate base - Distribution	13,502,097	13,474,416	13,446,734	13,419,052	13,391,371	
37	Average rate base - Transmission	4,808,483	4,800,738	4,792,993	4,785,248	4,777,503	
38	Average rate base - Advanced DMS	875,769	868,441	861,112	853,784	846,455	
39	Average rate base - Communication	2,374,000	2,363,850	2,353,700	2,343,550	2,333,400	
40	Average rate base - Enterprise Application	1,176,236	1,156,467	1,136,698	1,116,930	1,097,161	
41							

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 1

For the period January 1, 2019 through December 31, 2019

Bateman Exhibit 4

Calculation of SC Retail Costs

Page 3

Calculation of South Carolina Retail Costs						
Line	2020	2020	2020	2020	2020	Total
No. Description	Jan	Feb	Mar	Apr	May	
42 <u>Return on rate base:</u>						
43 Long-term debt [4]	1.908%	1.908%	1.908%	1.908%	1.908%	
44 Members' equity [4]	7.415%	7.415%	7.415%	7.415%	7.415%	
45 Distribution Debt return on rate base (L36 x L43 / 12)	21,471	21,427	21,383	21,339	21,295	237,798
46 Transmission Debt return on rate base (L37 x L43 / 12)	7,646	7,634	7,622	7,609	7,597	95,176
47 Advance DMS Debt return on rate base (L38 x L43 / 12)	1,393	1,381	1,369	1,358	1,346	7,546
48 Communication Debt return on rate base (L39 x L43 / 12)	3,775	3,759	3,743	3,727	3,710	42,029
49 Enterprise Application Debt return on rate base (L40 x L43 / 12)	1,870	1,839	1,808	1,776	1,745	9,981
50 Distribution Equity return on rate base (L36 x L44 / 12)	83,432	83,261	83,090	82,919	82,748	924,057
51 Transmission Equity return on rate base (L37 x L44 / 12)	29,713	29,665	29,617	29,569	29,521	369,845
52 Advance DMS Equity return on rate base (L38 x L44 / 12)	5,412	5,366	5,321	5,276	5,230	29,322
53 Communication Equity return on rate base (L39 x L44 / 12)	14,669	14,607	14,544	14,481	14,419	163,321
54 Enterprise Application Equity return on rate base (L40 x L44 / 12)	7,268	7,146	7,024	6,902	6,780	38,784
55						
56 <u>Other operation and maintenance expense: [3]</u>						
57 Distribution O&M						346,883
58 Transmission O&M						16,828
59 General Plant O&M						739,840
60 Total O&M	-	-	-	-	-	1,103,551
61						
62 <u>Depreciation and amortization:</u>						
63 Distribution depreciation expense (L19)	27,682	27,682	27,682	27,682	27,682	292,452
64 Transmission depreciation expense (L20)	7,745	7,745	7,745	7,745	7,745	92,312
65 General Plant depreciation expense (Sum(L21: L23))	37,247	37,247	37,247	37,247	37,247	243,177
66 Total Depreciation	72,674	72,674	72,674	72,674	72,674	627,941
67						
68 <u>General taxes:</u>						
69 Property tax rate - South Carolina	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
70 Property tax rate - Combined North Carolina and South Carolina	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
71						
72 Distribution property tax expense	15,452	15,452	15,452	15,452	15,452	77,261
73 Transmission property tax expense	1,547	1,547	1,547	1,547	1,547	7,735
74 General Plant property tax expense	1,431	1,431	1,431	1,431	1,431	7,156
75 Impact to general taxes (Sum (L72:L74))	18,430	18,430	18,430	18,430	18,430	92,152
76						
77 Total impact to operating income:						
78 Distribution (L57 + L63 + L72)	43,134	43,134	43,134	43,134	43,134	716,596
79 Transmission (L58 + L64 + L73)	9,292	9,292	9,292	9,292	9,292	116,876
80 General Plant (L59 + L65 + L74)	38,679	38,679	38,679	38,679	38,679	990,173
81						
82 <u>Amount for Deferral:</u>						
83 Distribution impact to operating income (L45 + L50 + L78)	148,037	147,822	147,607	147,392	147,177	1,878,451
84 Transmission impact to operating income (L46 + L51 + L79)	46,651	46,591	46,531	46,470	46,410	581,897
85 General plant impact to operating income (sum(L47:49) + sum(L52:54) + L80)	73,066	72,776	72,487	72,198	71,908	1,281,156
86 Total	267,754	267,189	266,624	266,060	265,495	3,741,504
87 Distribution Cumulative amount for deferral	1,319,741	1,474,827	1,630,602	1,787,071	1,944,239	
88 Transmission Cumulative amount for deferral	404,689	453,503	502,542	551,807	601,300	
89 General Plant Cumulative amount for deferral	1,022,300	1,100,824	1,179,518	1,258,382	1,337,418	
90						
91 <u>Balance for return</u>						
92 Distribution Balance for Return (Prior Month L89 + Current Month L89 /2)	1,245,723	1,400,916	1,556,799	1,713,375	1,870,650	
93 Transmission Balance for Return (Prior Month L90 + Current Month L90 /2)	381,363	430,208	479,277	528,572	578,094	
94 General Plant Balance for Return (Prior Month L90 + Current Month L90 /2)	985,767	1,064,436	1,143,275	1,222,283	1,301,463	
95						

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 1

For the period January 1, 2019 through December 31, 2019

Bateman Exhibit 4

Calculation of SC Retail Costs

Page 3

<u>Calculation of South Carolina Retail Costs</u>		2020	2020	2020	2020	2020	
Line		<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Total</u>
No.	Description						
96	<u>Return on Deferred Balance</u>						
97	After Tax Long-term debt [4]	1.432%	1.432%	1.432%	1.432%	1.432%	
98	After Tax Members' equity [4]	5.565%	5.565%	5.565%	5.565%	5.565%	
99	Distribution Debt Return on Deferral (L92 * L97/12)	1,487	1,672	1,858	2,045	2,232	15,697
100	Transmission Debt Return on Deferral (L93 * L97/12)	455	513	572	631	690	4,661
101	General Plant Debt Return on Deferral (L94 * L97/12)	1,176	1,270	1,364	1,459	1,553	13,068
102	Distribution Equity Return on Deferral (L92 * L98/12)	5,777	6,497	7,220	7,946	8,675	60,998
103	Transmission Equity Return on Deferral (L93 * L98/12)	1,769	1,995	2,223	2,451	2,681	18,112
104	General Plant Equity Return on Deferral (L94 * L98/12)	4,572	4,936	5,302	5,668	6,036	50,782
105	Total (Sum L99:L104)	15,235	16,884	18,539	20,200	21,867	163,319
106							
107	<u>Total Deferred balance</u>						
108	Distribution deferral (L83 + L99 + L102)	155,301	155,990	156,684	157,382	158,084	1,955,146
109	Transmission deferral (L84 + L100 + L103)	48,875	49,099	49,325	49,552	49,781	604,670
110	General Plant deferral (L85 + L101 + L104)	78,814	78,983	79,153	79,325	79,497	1,345,006
111	Total Sum (L108:L110)	282,989	284,073	285,163	286,259	287,362	3,904,823
112							
113	<u>Annual Amortization</u>						
114	Distribution amortization amount (L108/2)						977,573
115	Transmission amortization amount (L109/2)						302,335
116	General Plant amortization amount (L110/2)						672,503
117	Total Annual amortization amount (L111/2)						1,952,411

- [1] Based on lag time assumptions noted on Page 6
- distribution plant, January based on 2018 capital spend. February - December based on 2018 capital spend.
- transmission plant, January - June based on 2018 capital spend. July - December based on 2018 capital spend.
- communication plant, January - March based on 2018 capital spend. April - December based on 2018 capital spend.
- Advance DMS and Enterprise Systems annual amounts amount from Page 6 [D] plant.
- [2] Per accounting.
- [3] From Bateman Exhibit 4 page 6.
- [4] From Bateman exhibit 4 page 7, lines 3 and 4.

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE I
REVENUE REQUIREMENT

For the period January 1, 2020 through December 31, 2020

Bateman Exhibit 4

Page 4

Line No.	Description	Total SC Retail	Depreciation Rate	Depreciation
1	<u>Impact to Rate Base Line Items</u>			
2	<u>Additions to gross electric plant:</u>			
3	Distribution [1]	\$ 21,773,026	2.43%	\$ 529,085
4	Transmission [1]	4,961,227	1.91%	94,759
5	General - Advanced DMS [1]	1,096,228	10.00%	109,623
6	General - Communication [1]	5,905,312	5.00%	295,266
7	General - Enterprise Applications [1]	1,637,858	20.00%	327,572
8	Impact to electric plant in service (Sum L3 through L7)	<u>\$ 35,373,651</u>		<u>\$ 1,356,304</u>
9				
10	<u>Accumulated depreciation & amortization:</u>			
11	Distribution accumulated depreciation (-L3)	\$ (529,085)		
12	Transmission accumulated depreciation (-L4)	(94,759)		
13	General Plant accumulated depreciation (-Sum L5 through L7)	(732,460)		
14	Impact to accumulated depreciation (Sum L11 through L13)	<u>\$ (1,356,304)</u>		
15				
16	<u>Net electric plant:</u>			
17	Distribution (L3 + L11)	\$ 21,243,941		
18	Transmission (L4 + L12)	4,866,467		
19	General Plant (L5 + L6 + L7 + L13)	7,906,938		
20	Impact to net plant (Sum L17 through L19)	<u>\$ 34,017,347</u>		
21				
22	Cost of Capital [2]	9.36%		
23				
24	<u>Rate Base Revenue Requirement</u>			
25	Distribution (L17 * L22)	\$ 1,989,441		
26	Transmission (L18 * L22)	455,732		
27	General Plant (L19 * L22)	740,464		
28	Impact to net plant (Sum L25 through L27)	<u>\$ 3,185,637</u>		
29				
30	<u>Impact to Income Statement Line Items</u>			
31	<u>Depreciation and amortization:</u>			
32	Distribution depreciation expense (L3)	\$ 529,085		
33	Transmission depreciation expense (L4)	94,759		
34	General Plant depreciation expense (Sum L5 through L7)	732,460		
35	Impact to deprec. and amortization (Sum L32 through L34)	<u>\$ 1,356,304</u>		
36				
37	<u>Removal of expired amortization of 2018 deferral:</u>			
38	Distribution depreciation expense	\$ (1,145,261)		
39	Transmission depreciation expense	(121,947)		
40	General Plant depreciation expense	(805,394)		
41	Impact to deprec. and amortization (Sum L38 through L40)	<u>\$ (2,072,602)</u>		

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE I
REVENUE REQUIREMENT

For the period January 1, 2020 through December 31, 2020

Bateman Exhibit 4

Page 4 Cont.

Line No.	Description	Total SC Retail
42		
43	<u>Amortization of 2019 deferral:</u>	
44	Distribution depreciation expense	
45	Transmission depreciation expense	
46	General Plant depreciation expense	
47	Impact to deprec. and amortization (Sum L44 through L46)	\$ -
48		
49	<u>Amortization of 2020 deferral:</u>	
50	Distribution depreciation expense [3]	\$ 1,534,505
51	Transmission depreciation expense [3]	273,470
52	General Plant depreciation expense [3]	1,152,661
53	Impact to deprec. and amortization (Sum L50 through L52)	\$ 2,960,636
54		
55	<u>General taxes:</u>	
56	Property tax rate - South Carolina	1.3565%
57	Property tax rate - Combined North Carolina and South Carolina	0.3815%
58		
59	Distribution property tax expense (L3 * L56)	\$ 295,341
60	Transmission property tax expense (L4 * L57)	18,928
61	General Plant property tax expense (Sum(L5 through L7) * L57)	32,961
62	Impact to general taxes (Sum L59 through L61)	\$ 347,230
63		
64	<u>Income Taxes</u>	24.95%
65	Distribution (L32 + L38 + L44 + L50 + L59) * -L64	\$ (302,810)
66	Transmission (L33 + L39 + L45 + L51 + L60) * -L64	(66,170)
67	General Plant (L34 + L40 + L46 + L52 + L61) * -L64	(277,616)
68	Total income taxes (Sum L65 through L67)	\$ (646,596)
69		
70	<u>Total Income statement impact</u>	
71	Distribution (L32 + L38 + L44 + L50 + L59 + L65)	\$ 910,859
72	Transmission (L33 + L39 + L45 + L51 + L60 + L66)	199,041
73	General Plant (L34 + L40 + L46 + L52 + L61 + L67)	835,072
74	Total income statement impact (Sum L71 through L73)	\$ 1,944,972
75		
76	<u>Income Statement Requirement</u>	74.72% [4]
77	Distribution (L71 / L76)	\$ 1,219,070
78	Transmission (L72 / L76)	266,391
79	General Plant (L73 / L76)	1,117,639
80	Total income statement Requirement (Sum L77 through L79)	\$ 2,603,100

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
DUKE ENERGY PROGRESS, LLC
REVENUE REQUIREMENT
For the period January 1, 2020 through December 31, 2020

Bateman Exhibit 4
Page 4 Cont.

Line		Total
<u>No.</u>	<u>Description</u>	<u>SC Retail</u>
81		
82	<u>Total Revenue Requirement for Plant additions and Deferral</u>	
83	Distribution (L25 + L77)	\$ 3,208,510
84	Transmission (L26 + L78)	722,123
85	General Plant (L27 + L79)	1,858,104
86	Total Revenue Requirement (Sum L83 through L85)	<u>\$ 5,788,737</u>

[1] Bateman Exhibit 4 page 5, lines 7-11 May, 2021.
[2] Bateman Exhibit 4 page 7, line 5.
[3] Bateman Exhibit 4 page 5, lines 114-116
[4] Bateman Exhibit 4 page 7, line 24.

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 2

For the period January 1, 2020 through December 31, 2020

Bateman Exhibit 4

Calculation of SC Retail Costs

Page 5

Calculation of South Carolina Retail Costs		2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
Line		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No.	Description												
1	Plant-in-Service: [1]												
2	Distribution to Plant in Service	1,125,745	1,877,025	1,877,025	1,877,025	1,877,025	1,877,025	1,877,025	1,877,025	1,877,025	1,877,025	1,877,025	1,877,025
3	Transmission to Plant in Service	145,772	145,772	145,772	145,772	145,772	145,772	681,100	681,100	681,100	681,100	681,100	681,100
4	Advanced DMS Plant in Service												1,096,228
5	Communications Plant in Service	198,224	198,224	198,224	590,071	590,071	590,071	590,071	590,071	590,071	590,071	590,071	590,071
6	Enterprise Applications Plant in Service	-	-	-	-	-	-	-	-	-	-	-	1,637,858
7	Cumulative Distribution investment (L2)	1,125,745	3,002,771	4,879,796	6,756,822	8,633,847	10,510,873	12,387,898	14,264,924	16,141,949	18,018,975	19,896,000	21,773,026
8	Cumulative Transmission investment (L3)	145,772	291,543	437,315	583,086	728,858	874,629	1,555,729	2,236,828	2,917,928	3,599,028	4,280,127	4,961,227
9	Cumulative Advanced DMS investment (L4)												1,096,228
10	Cumulative Communication investment (L5)	198,224	396,448	594,672	1,184,743	1,774,814	2,364,885	2,954,956	3,545,027	4,135,099	4,725,170	5,315,241	5,905,312
11	Cumulative Enterprise Application investment (L6)	-	-	-	-	-	-	-	-	-	-	-	1,637,858
12													
13	Accumulated depreciation & amortization:												
14	Distribution plant depreciation rate [2]	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%
15	Transmission plant depreciation rate [2]	1.91%	1.91%	1.91%	1.91%	1.91%	1.91%	1.91%	1.91%	1.91%	1.91%	1.91%	1.91%
16	Advance DMS plant depreciation rate [2]	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
17	Communication plant depreciation rate [2]	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
18	Enterprise Application plant depreciation rate [2]	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
19	Distribution depreciation expense (L7 * L14)	-	2,280	6,081	9,882	13,683	17,484	21,285	25,085	28,886	32,687	36,488	40,289
20	Transmission depreciation expense (L8 * L15)	-	232	464	696	928	1,160	1,392	2,476	3,560	4,644	5,728	6,813
21	Advanced DMS depreciation expense (L9 * L16)	-	-	-	-	-	-	-	-	-	-	-	-
22	Communication depreciation expense (L10 * L17)	-	826	1,652	2,478	4,936	7,395	9,854	12,312	14,771	17,230	19,688	22,147
23	Enterprise Application depreciation expense (L11 * L18)	-	-	-	-	-	-	-	-	-	-	-	-
24	Distribution accumulated depreciation	-	(2,280)	(8,360)	(18,242)	(31,924)	(49,408)	(70,692)	(95,778)	(124,664)	(157,352)	(193,840)	(234,130)
25	Transmission accumulated depreciation	-	(232)	(696)	(1,392)	(2,320)	(3,480)	(4,872)	(7,349)	(10,909)	(15,553)	(21,282)	(28,094)
26	Advanced DMS accumulated depreciation	-	-	-	-	-	-	-	-	-	-	-	-
27	Communication accumulated depreciation	-	(826)	(2,478)	(4,956)	(9,892)	(17,287)	(27,141)	(39,453)	(54,224)	(71,454)	(91,142)	(113,289)
28	Enterprise Application accumulated depreciation	-	-	-	-	-	-	-	-	-	-	-	-
29													
30	Net electric plant												
31	Distribution (L7 + L24)	1,125,745	3,000,491	4,871,436	6,738,580	8,601,923	10,461,465	12,317,206	14,169,146	16,017,285	17,861,623	19,702,160	21,538,896
32	Transmission (L8 + L25)	145,772	291,311	436,619	581,694	726,538	871,149	1,550,856	2,229,480	2,907,019	3,583,474	4,258,845	4,933,132
33	Advanced DMS (L9 + L26)												1,096,228
34	Communication (L10 + L27)	198,224	395,622	592,194	1,179,787	1,764,922	2,347,598	2,927,815	3,505,574	4,080,875	4,653,716	5,224,099	5,792,023
35	Enterprise Application (L11 + L28)	-	-	-	-	-	-	-	-	-	-	-	1,637,858
36	Average rate base - Distribution	562,873	2,063,118	3,935,963	5,805,008	7,670,251	9,531,694	11,389,335	13,243,176	15,093,215	16,939,454	18,781,891	20,620,528
37	Average rate base - Transmission	72,886	218,541	363,965	509,156	654,116	798,843	1,211,003	1,890,168	2,568,249	3,245,247	3,921,160	4,595,989
38	Average rate base - Advanced DMS	-	-	-	-	-	-	-	-	-	-	-	548,114
39	Average rate base - Communication	99,112	296,923	493,908	885,990	1,472,355	2,056,260	2,637,707	3,216,695	3,793,224	4,367,295	4,938,908	5,508,061
40	Average rate base - Enterprise Application	-	-	-	-	-	-	-	-	-	-	-	818,929
41													
42	Return on rate base:												
43	Long-term debt [4]	1.908%	1.908%	1.908%	1.908%	1.908%	1.908%	1.908%	1.908%	1.908%	1.908%	1.908%	1.908%
44	Members' equity [4]	7.415%	7.415%	7.415%	7.415%	7.415%	7.415%	7.415%	7.415%	7.415%	7.415%	7.415%	7.415%
45	Distribution Debt return on rate base (L36 x L43 / 12)	895	3,281	6,259	9,231	12,197	15,157	18,111	21,059	24,001	26,937	29,866	32,790
46	Transmission Debt return on rate base (L37 x L43 / 12)	116	348	579	810	1,040	1,270	1,926	3,006	4,084	5,160	6,235	7,308
47	Advance DMS Debt return on rate base (L38 x L43 / 12)	-	-	-	-	-	-	-	-	-	-	-	872
48	Communication Debt return on rate base (L39 x L43 / 12)	158	472	785	1,409	2,341	3,270	4,194	5,115	6,032	6,945	7,854	8,759
49	Enterprise Application Debt return on rate base (L40 x L43 / 12)	-	-	-	-	-	-	-	-	-	-	-	1,302
50	Distribution Equity return on rate base (L36 x L44 / 12)	3,478	12,748	24,321	35,870	47,396	58,898	70,377	81,832	93,264	104,673	116,057	127,419
51	Transmission Equity return on rate base (L37 x L44 / 12)	450	1,350	2,249	3,146	4,042	4,936	7,483	11,680	15,870	20,053	24,230	28,400
52	Advance DMS Equity return on rate base (L38 x L44 / 12)	-	-	-	-	-	-	-	-	-	-	-	3,387
53	Communication Equity return on rate base (L39 x L44 / 12)	612	1,835	3,052	5,475	9,098	12,706	16,299	19,877	23,439	26,986	30,519	34,035

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 2
For the period January 1, 2020 through December 31, 2020

<u>Calculation of South Carolina Retail Costs</u>		2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
Line		<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
No.	Description												
107	<u>Total</u>												
108	Distribution deferral (L83 + L99 + L102)	51,521	65,798	84,587	103,456	122,405	141,435	160,547	179,740	199,016	218,374	237,816	257,341
109	Transmission deferral (L84 + L100 + L103)	9,387	10,809	12,238	13,673	15,115	16,564	20,105	26,601	33,127	39,683	46,268	52,884
110	General Plant deferral (L85 + L101 + L104)	101,003	103,961	106,931	111,438	119,122	126,833	134,569	142,331	150,119	157,933	165,774	184,293
111	Total Sum (L108:L110)	161,911	180,568	203,756	228,567	256,643	284,832	315,220	348,672	382,262	415,990	449,858	494,518
112													
113	<u>Annual Amortization</u>												
114	Distribution amortization amount (L108/2)												
115	Transmission amortization amount (L109/2)												
116	General Plant amortization amount (L110/2)												
117	Total Annual amortization amount (L111/2)												

[1] Based on lag time assumptions noted on Page 6
- distribution plant, January based on 2018 capital spend. February - December based on monthly amount from Page 6 [A]
- transmission plant, January - June based on 2018 capital spend. July - December based on monthly amount from Page 6 [B]
- communication plant, January - March based on 2018 capital spend. April - December based on monthly amount from Page 6 [C]
- Advance DMS and Enterprise Systems annual amounts amount from Page 6 [D] placed in service in December.

[2] Per accounting

[3] From Bateman exhibit 4 page 6.

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 2

For the period January 1, 2020 through December 31, 2020

Bateman Exhibit 4

Calculation of SC Retail Costs

Page 5

Calculation of South Carolina Retail Costs		2021	2021	2021	2021	2021	Total
Line No.	Description	Jan	Feb	Mar	Apr	May	
1	Plant-in-Service: [1]						
2	Distribution to Plant in Service						
3	Transmission to Plant in Service						
4	Advanced DMS Plant in Service						
5	Communications Plant in Service						
6	Enterprise Applications Plant in Service						
7	Cumulative Distribution investment (L2)	21,773,026	21,773,026	21,773,026	21,773,026	21,773,026	
8	Cumulative Transmission investment (L3)	4,961,227	4,961,227	4,961,227	4,961,227	4,961,227	
9	Cumulative Advanced DMS investment (L4)	1,096,228	1,096,228	1,096,228	1,096,228	1,096,228	
10	Cumulative Communication investment (L5)	5,905,312	5,905,312	5,905,312	5,905,312	5,905,312	
11	Cumulative Enterprise Application investment (L6)	1,637,858	1,637,858	1,637,858	1,637,858	1,637,858	
12							
13	Accumulated depreciation & amortization:						
14	Distribution plant depreciation rate [2]	2.43%	2.43%	2.43%	2.43%	2.43%	
15	Transmission plant depreciation rate [2]	1.91%	1.91%	1.91%	1.91%	1.91%	
16	Advance DMS plant depreciation rate [2]	10.00%	10.00%	10.00%	10.00%	10.00%	
17	Communication plant depreciation rate [2]	5.00%	5.00%	5.00%	5.00%	5.00%	
18	Enterprise Application plant depreciation rate [2]	20.00%	20.00%	20.00%	20.00%	20.00%	
19	Distribution depreciation expense (L7 * L14)	44,090	44,090	44,090	44,090	44,090	
20	Transmission depreciation expense (L8 * L15)	7,897	7,897	7,897	7,897	7,897	
21	Advanced DMS depreciation expense (L9 * L16)	9,135	9,135	9,135	9,135	9,135	
22	Communication depreciation expense (L10 * L17)	24,605	24,605	24,605	24,605	24,605	
23	Enterprise Application depreciation expense (L11 * L18)	27,298	27,298	27,298	27,298	27,298	
24	Distribution accumulated depreciation	(278,220)	(322,310)	(366,401)	(410,491)	(454,582)	
25	Transmission accumulated depreciation	(35,991)	(43,888)	(51,784)	(59,681)	(67,577)	
26	Advanced DMS accumulated depreciation	(9,135)	(18,270)	(27,406)	(36,541)	(45,676)	
27	Communication accumulated depreciation	(137,894)	(162,500)	(187,105)	(211,711)	(236,316)	
28	Enterprise Application accumulated depreciation	(27,298)	(54,595)	(81,893)	(109,191)	(136,488)	
29							
30	Net electric plant						
31	Distribution (L7 + L24)	21,494,805	21,450,715	21,406,625	21,362,534	21,318,444	
32	Transmission (L8 + L25)	4,925,236	4,917,339	4,909,442	4,901,546	4,893,649	
33	Advanced DMS (L9 + L26)	1,087,093	1,077,958	1,068,823	1,059,687	1,050,552	
34	Communication (L10 + L27)	5,767,418	5,742,812	5,718,207	5,693,602	5,668,996	
35	Enterprise Application (L11 + L28)	1,610,560	1,583,263	1,555,965	1,528,667	1,501,370	
36	Average rate base - Distribution	21,516,851	21,472,760	21,428,670	21,384,580	21,340,489	
37	Average rate base - Transmission	4,929,184	4,921,287	4,913,391	4,905,494	4,897,598	
38	Average rate base - Advanced DMS	1,091,661	1,082,526	1,073,390	1,064,255	1,055,120	
39	Average rate base - Communication	5,779,721	5,755,115	5,730,510	5,705,904	5,681,299	
40	Average rate base - Enterprise Application	1,624,209	1,596,911	1,569,614	1,542,316	1,515,019	
41							
42	Return on rate base:						
43	Long-term debt [4]	1.908%	1.908%	1.908%	1.908%	1.908%	
44	Members' equity [4]	7.415%	7.415%	7.415%	7.415%	7.415%	
45	Distribution Debt return on rate base (L36 x L43 / 12)	34,215	34,145	34,075	34,005	33,935	370,159
46	Transmission Debt return on rate base (L37 x L43 / 12)	7,838	7,826	7,813	7,801	7,788	70,947
47	Advance DMS Debt return on rate base (L38 x L43 / 12)	1,736	1,721	1,707	1,692	1,678	9,406
48	Communication Debt return on rate base (L39 x L43 / 12)	9,191	9,152	9,112	9,073	9,034	92,896
49	Enterprise Application Debt return on rate base (L40 x L43 / 12)	2,583	2,539	2,496	2,453	2,409	13,782
50	Distribution Equity return on rate base (L36 x L44 / 12)	132,957	132,685	132,412	132,140	131,867	1,438,397
51	Transmission Equity return on rate base (L37 x L44 / 12)	30,458	30,410	30,361	30,312	30,263	275,694
52	Advance DMS Equity return on rate base (L38 x L44 / 12)	6,746	6,689	6,633	6,576	6,520	36,550
53	Communication Equity return on rate base (L39 x L44 / 12)	35,714	35,562	35,410	35,258	35,106	360,983

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 2

For the period January 1, 2020 through December 31, 2020

Bateman Exhibit 4
Calculation of SC Retail Costs
Page 5

<u>Calculation of South Carolina Retail Costs</u>		2021	2021	2021	2021	2021	
Line		<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Total</u>
No.	Description						
54	Enterprise Application Equity return on rate base (L40 x L44 / 12)	10,036	9,868	9,699	9,530	9,362	53,555
55							
56	<u>Other operation and maintenance expense: [3]</u>						
57	Distribution O&M						563,976
58	Transmission O&M						105,519
59	General Plant O&M						1,199,271
60	Total O&M	-	-	-	-	-	1,868,766
61							
62	<u>Depreciation and amortization:</u>						
63	Distribution depreciation expense (L19)	44,090	44,090	44,090	44,090	44,090	454,582
64	Transmission depreciation expense (L20)	7,897	7,897	7,897	7,897	7,897	67,577
65	General Plant depreciation expense (Sum(L21: L23))	61,038	61,038	61,038	61,038	61,038	418,480
66	General Plant O&M	113,025	113,025	113,025	113,025	113,025	940,639
67							
68	<u>General taxes:</u>						
69	Property tax rate - South Carolina	1.36%	1.36%	1.36%	1.36%	1.36%	1.36%
70	Property tax rate - Combined North Carolina and South Carolina	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
71							
72	Distribution property tax expense	24,612	24,612	24,612	24,612	24,612	123,059
73	Transmission property tax expense	1,577	1,577	1,577	1,577	1,577	7,887
74	General Plant property tax expense	2,747	2,747	2,747	2,747	2,747	13,734
75	Impact to general taxes (Sum (L72:L74))	28,936	28,936	28,936	28,936	28,936	144,679
76							
77	Total impact to operating income:						
78	Distribution (L57 + L63 + L72)	68,702	68,702	68,702	68,702	68,702	1,141,617
79	Transmission (L58 + L64 + L73)	9,474	9,474	9,474	9,474	9,474	180,983
80	General Plant (L59 + L65 + L74)	63,785	63,785	63,785	63,785	63,785	1,631,485
81							
82	<u>Total impact to operating income:</u>						
83	Distribution impact to operating income (L45 + L50 + L78)	235,875	235,532	235,190	234,847	234,505	2,950,172
84	Transmission impact to operating income (L46 + L51 + L79)	47,771	47,709	47,648	47,587	47,525	527,624
85	General plant impact to operating income (sum(L47:49) + sum(L52:54) + L80)	129,791	129,316	128,842	128,368	127,894	2,198,658
86	Total	413,436	412,558	411,680	410,802	409,923	5,676,454
87	Distribution Cumulative amount for deferral	2,057,909	2,304,753	2,552,695	2,801,741	3,051,898	
88	Transmission Cumulative amount for deferral	344,226	393,803	443,608	493,643	543,908	
89	General Plant Cumulative amount for deferral	1,734,097	1,873,146	2,012,533	2,152,260	2,292,329	
90							
91	<u>Balance for return</u>						
92	Distribution Balance for Return (Prior Month L89 + Current Month L89 /2)	1,939,972	2,186,987	2,435,100	2,684,317	2,934,645	
93	Transmission Balance for Return (Prior Month L90 + Current Month L90 /2)	320,341	369,949	419,784	469,849	520,145	
94	General Plant Balance for Return (Prior Month L90 + Current Month L90 /2)	1,669,201	1,808,488	1,948,112	2,088,076	2,228,382	
95							
96	<u>Return on Deferred Balance</u>						
97	After Tax Long-term debt [4]	1.432%	1.432%	1.432%	1.432%	1.432%	
98	After Tax Members' equity [4]	5.565%	5.565%	5.565%	5.565%	5.565%	
99	Distribution Debt Return on Deferral (L92 * L97/12)	2,315	2,610	2,906	3,204	3,502	24,323
100	Transmission Debt Return on Deferral (L93 * L97/12)	382	442	501	561	621	3,954
101	General Plant Debt Return on Deferral (L94 * L97/12)	1,992	2,158	2,325	2,492	2,659	21,831
102	Distribution Equity Return on Deferral (L92 * L98/12)	8,997	10,142	11,293	12,449	13,609	94,515
103	Transmission Equity Return on Deferral (L93 * L98/12)	1,486	1,716	1,947	2,179	2,412	15,363
104	General Plant Equity Return on Deferral (L94 * L98/12)	7,741	8,387	9,034	9,683	10,334	84,834
105	Total (Sum L99:L104)	22,913	25,454	28,006	30,567	33,138	244,819

106

DUKE ENERGY PROGRESS, LLC

DOCKET 2018-318-E

SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN PHASE 2

For the period January 1, 2020 through December 31, 2020

Bateman Exhibit 4

Calculation of SC Retail Costs

Page 5

<u>Calculation of South Carolina Retail Costs</u>		2021	2021	2021	2021	2021	
Line		<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Total</u>
No.	Description						
107	<u>Total</u>						
108	Distribution deferral (L83 + L99 + L102)	247,187	248,284	249,389	250,499	251,616	3,069,009
109	Transmission deferral (L84 + L100 + L103)	49,639	49,866	50,096	50,326	50,558	546,941
110	General Plant deferral (L85 + L101 + L104)	139,524	139,861	140,201	140,543	140,887	2,305,323
111	Total Sum (L108:L110)	436,349	438,012	439,686	441,369	443,062	5,921,273
112							
113	<u>Annual Amortization</u>						
114	Distribution amortization amount (L108/2)						1,534,505
115	Transmission amortization amount (L109/2)						273,470
116	General Plant amortization amount (L110/2)						1,152,661
117	Total Annual amortization amount (L111/2)						2,960,636

[1] Based on lag time assumptions noted on Page 6
- distribution plant, January based on 2018 capital spend. February - December based on 2018 capital spend.
- transmission plant, January - June based on 2018 capital spend. July - December based on 2018 capital spend.
- communication plant, January - March based on 2018 capital spend. April - December based on 2018 capital spend.
- Advance DMS and Enterprise Systems annual amounts amount from Page 6 [D] f

[2] Per accounting

[3] From Bateman exhibit 4 page 6.

DUKE ENERGY PROGRESS, LLC
 DOCKET 2018-318-E
 SOUTH CAROLINA RETAIL GRID IMPROVEMENT
 Capital Spend and Installation O&M Estimates
 Dollars in Millions

Bateman Exhibit 4
 Calculation of SC Retail Costs
 Page 6

DEP Total Capital Spend				SC Retail	DEP Total Capital Spend					
SYSTEM [1]		2019	2020	Allocation [2]	SC Retail	2019		2020		
						Monthly		Monthly		
Energy Storage (NC Dist)		0.385	5.061	Direct Direct	Energy Storage (NC Dist)					
Distribution NC		96.335	128.034		Distribution NC					
Energy Storage (SC Dist)		0.042	0.007		Energy Storage (SC Dist)		0.042	0.003	0.007	0.001
Distribution SC		13.467	22.518		Distribution SC		13.467	1.122	22.518	1.876
Total Distribution		110.228	155.620		Total Distribution [A]		13.509	1.126	22.524	1.877
Energy Storage (Trans)		0.427	5.068	9.31%	Energy Storage (Trans)		0.040	0.003	0.472	0.039
Transmission		18.365	82.732	9.31%	Transmission		1.710	0.142	7.701	0.642
Total Transmission		18.791	87.800		Total Transmission [B]		1.749	0.146	8.173	0.681
Advanced DMS		7.642	9.526	11.51%	Advanced DMS [D]		0.879	0.073	1.096	0.091
Communication		20.670	61.530	11.51%	Communication [C]		2.379	0.198	7.081	0.590
Enterprise Application		10.307	14.232	11.51%	Enterprise Application [D]		1.186	0.099	1.638	0.136
TOTAL		167.638	328.708		TOTAL		19.702	1.642	40.512	3.376
Plant in Service Assumptions [1]		Lag between Capital Spend and asset in service								
Distribution		1 month								
Transmission		6 months								
Communication		3 months								
Advanced DMS & Enterprise Application		Annually in December								
DEP Total O&M				SC Retail	DEP Total O&M Spend					
SYSTEM [1]		2019	2020	Allocation [2]	SC Retail	2019		2020		
						Monthly		Monthly		
Energy Storage (NC Dist)		0.021	0.281	Direct Direct	Energy Storage (NC Dist)					
Distribution NC		2.549	2.770		Distribution NC					
Energy Storage (SC Dist)		0.002	0.000		Energy Storage (SC Dist)		0.002	0.000	0.000	0.000
Distribution SC		0.345	0.564		Distribution SC		0.345	0.029	0.564	0.047
Total Distribution		2.917	3.615		Total Distribution		0.347	0.029	0.564	0.047
Energy Storage (Trans)		0.024	0.282	9.31%	Energy Storage (Trans)		0.002	0.000	0.026	0.002
Transmission		0.157	0.852	9.31%	Transmission		0.015	0.001	0.079	0.007
Total Transmission		0.181	1.134		Total Transmission		0.017	0.001	0.106	0.009
Advanced DMS		0.528	0.658	11.51%	Advanced DMS		0.061	0.005	0.076	0.006
Communication		1.012	3.012	11.51%	Communication		0.116	0.010	0.347	0.029
Enterprise Application		4.889	6.752	11.51%	Enterprise Application		0.563	0.047	0.777	0.065
TOTAL		9.527	15.170		TOTAL		1.104	0.092	1.869	0.156

[1] System numbers and Plant in Service assumptions from Witness Oliver

[2] Allocation factors from the Cost of service study.

DUKE ENERGY PROGRESS, LLC
DOCKET 2018-318-E
SOUTH CAROLINA RETAIL GRID IMPROVEMENT PLAN

Bateman Exhibit 4
Calculation of SC Retail Costs
Page 7

Weighted Average Cost of Capital

Line No.	Description	Capital Structure (a)	Cost/Return (b)	Weighted Cost/Return (c)	Income Taxes Factor (d)	After Tax Return (e)	Income Taxes Factor (f)	Revenue Requirement Excluding Gross Receipt Tax and Regulatory Fee (g)	Combined Gross Receipts Tax and Regulatory Fee Factor (h)	Revenue Requirement Including Gross Receipt Tax and Regulatory Fee (i)
1										
2										
3	Long-term debt	47.0000%	4.06%	1.9082%	0.7505000	1.43210%	1.00000	1.90820%	99.55699%	1.91669%
4	Members' equity	53.0000%	10.50%	5.5650%	1.0000000	5.56500%	0.75050	7.41506%	99.55699%	7.44805%
5	Total (L3 + L4)	<u>100.0000%</u>		<u>7.4732%</u>		<u>6.9971%</u>		<u>9.3233%</u>		<u>9.3647%</u>
6										
7	Gross revenue				1.0000000					
8	State income tax rate				0.0500000					
9	Remainder (L7 - L8)				0.9500000					
10	Federal income tax rate				0.2100000					
11	Federal income tax (L9 x L10)				0.1995000					
12	State income tax rate				0.0500000					
13	Combined income tax rate (L11 + L12)				0.2495000					
14	1 minus combined income tax rate (1 - L13)				0.7505000					
15										
16	Gross revenue				1.0000000					
17										
18	Gross receipts tax rate				0.0030000					
19	Regulatory fee rate				0.0014301					
20	Combined gross receipts tax and regulatory fee rate (L16 - L18 - L19)				0.9955699					
21	State income tax (L8 x L20)				0.0497785					
22	Balance (L20 - L21)				0.9457914					
23	Federal income tax (L10 x L22)				0.1986162					
24	Retention factor (L22 - L23)				<u>0.7471752</u>					